

MAKING THE INTERNATIONAL TRADE SYSTEM WORK FOR PARIS AGREEMENT: ASSESSING THE OPTIONS

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The adoption of the Paris Agreement in December 2015, its rapid entry into force in November 2016 following ratification by a critical mass of countries, and subsequent adoption of a detailed rulebook for its implementation in December 2018 in Katowice – ushered in a new era of international cooperation on climate change. If the 2°C goal is to be achieved, massive improvements in energy efficiency, a substantial scale-up in renewable energy production, and enhanced access to clean energy technologies will be required. This calls for unprecedented efforts across all areas of socioeconomic activity, and thus also depends on support from other international regimes. The issues of policy and regime coherence assume particular importance vis-à-vis the international trading system, given that trade has an important role to play towards achievement of the Paris goals – both directly and indirectly. The significant surge in WTO disputes pertaining to climate change and clean energy over the past several years is indicative of the tensions that are brewing at the interface between national climate policies and measures, on the one hand, and international legal regimes pertaining to trade, on the other. With the increasing importance of national measures following the adoption of the Paris Agreement, synergies and conflicts can be expected to change over time. Leaving the fate of climate-related actions to the WTO dispute settlement system is an option that is associated with risks and uncertainty, and could lead to a chilling effect on investment in the sector. That explains the importance of exploring the various ways in which trade policies and frameworks can create a more favourable environment for advancing the objectives of the Paris Agreement and their implementation. Based on an extensive literature review and a series of interviews with policymakers, trade law experts, and other stakeholders, and our own analysis, we have identified a set of options for improved alignment of the trade and climate regimes. These include general options addressing the link between trade and climate change, as well as options specifically related to border carbon adjustments (BCAs) and fossil fuel subsidies. Each of the proposed policy options is analysed with a focus on their political feasibility in the short term. In addition, where possible, we examine factors that may increase the utility and desirability of options, including their potential for reducing legal uncertainty. Based on this analysis, the article concludes with a set of recommendations for future policy reform.

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I. INTRODUCTION

December 2015 saw the adoption of the Paris Agreement¹ at COP21, which sets the aim of keeping the global temperature increase from pre-industrial levels well below 2°C and pursuing efforts to limit it to 1.5°C.² The Paris Agreement entered into force in November 2016, following the historically swift ratification by a critical mass of countries. Subsequently, at the 24th Conference of the Parties (COP) held in December 2018 in Katowice, the Parties to the United Nations Framework Convention on Climate Change (UNFCCC) adopted a detailed rulebook for implementing the Paris Agreement,³ thus heralding a new era of international cooperation on climate change. The Paris Agreement established a new international framework for the parties to the UNFCCC from 2020 onwards. The new regime is characterized by more universal efforts on climate change compared to the Kyoto Protocol, with the new agreement applying to both developed and developing countries. At the same time, the Agreement marks a transition towards a more bottom-up architecture for international climate cooperation. Central to this bottom-up approach is a system of national climate pledges, called nationally determined contributions, or NDCs. In other words, the Paris Agreement requires its parties to make their own plans on climate change mitigation, adaptation and other related areas. Importantly, the built-in flexibility and bottom-up nature of the Paris architecture are characterized by at least two major risks: (a) there is no certainty that the bottom-up pledges made by parties would add up to what is required to achieve the Paris Agreement's 2°C goal. (b) The architecture may be recipe for some parties to move ahead with ambitious climate action while others lag behind. In such a scenario, countries doing little may end up benefiting from arduous actions undertaken by others. For instance, in the ultimate free-ride, the US will withdraw completely from the Paris Agreement in 2020, demanding others do more.

Indeed, parties to the UNFCCC have pledged climate actions that differ widely in ambition, nature and scope, and, absent strong centralized enforcement, will arguably face very uneven implementation. The extent of challenges becomes clearer when judged in light of the fact that the aggregate pledges are far from adequate to keep the global temperature rise well below 2°C, let alone the more ambitious 1.5°C goal.⁴

Still, the Paris Agreement also creates room for countries to ratchet-up ambition in the future. The question then is how to strengthen actions so that emissions drop sharply once the Paris framework takes effect in 2020. This will require considerable reductions of fossil fuel use, widespread improvements in energy efficiency, a significant scale-up in the production of renewable energy, and enhanced access to clean energy technologies. Advancing such a multi-pronged agenda calls for unprecedented efforts across all areas of socioeconomic activity. It

¹ U.N. Framework Convention on Climate Change, *Report of the Conference of the Parties on its twenty-first session, held in Paris from 30 November to 13 December 2015 Addendum Part two: Action taken by the Conference of the Parties at its twenty-first session, Adoption of the Paris Agreement*, U.N. Doc. FCCC/CP/2015/10/Add.1, Decision 1/CP.21 (January 29, 2016) <<https://unfccc.int/resource/docs/2015/cop21/eng/10a01.pdf>>

² For an assessment of the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty see Intergovernmental Panel on Climate Change, IPCC Doc., *Global Warming of 1.5°C: Summary for Policymakers* (2018) <https://www.ipcc.ch/site/assets/uploads/sites/2/2018/07/SR15_SPM_version_stand_alone_LR.pdf>

³ See <<https://unfccc.int/process-and-meetings/the-paris-agreement/katowice-climate-package>>

⁴ U.N. Environment, United Nations Environment Programme, *Emissions Gap Report 2018*, <http://wedocs.unep.org/bitstream/handle/20.500.11822/26895/EGR2018_FullReport_EN.pdf?sequence=1&isAllowed=y>

also requires support from other international regimes, as rules that are working at cross-purposes may hamper climate action.

Policy and regime coherence are particularly important in the context of the international trade system. This is due to the multiple interlinkages between the trade and climate regimes. Trade has an important role to play towards the achievement of the Paris goals - both indirectly and directly. Indirectly, taking the requisite degree of climate action will require a major overhaul of domestic policies and measures, which may end up having significant cross-border trade effects, even though they are primarily intended as domestic measures. Besides, in implementing their NDCs, countries may opt for applying various 'direct' trade measures such as removing or reducing tariffs on environmental goods and services; developing technical standards for low-carbon products traded across borders; international transfer of climate-friendly technologies; application of border carbon adjustments; and so on. Notably, trade-related elements feature prominently in climate contributions under the Paris Agreement. According to a March 2017 study,⁵ among all the NDCs submitted around 45 percent included a direct reference to trade or trade measures, whereas around 22 percent included trade measures that were specifically geared towards fostering mitigation. While around 6 percent NDCs mentioned a reduction of trade barriers, around 11 percent entailed a reference to the regulation of trade on climate grounds. Indeed, with more ambitious NDCs expected in the future, trade-related climate measures are not only likely to remain in the spotlight, but may also assume increasing significance.

National climate policy measures with direct or indirect trade implications stand the risk of colliding with the rules and requirements put forward by the trade regimes. Such concerns have emerged particularly in the context of the World Trade Organization (WTO). This is not unexpected, given that there are certain fundamental differences between the UNFCCC and the WTO regimes. Climate change could be considered as an extreme case of market failure — the failure to incorporate the damage done by greenhouse gas (GHG) emissions into the prices of goods and services—creating grounds for government intervention to correct these market failures. Governments generally prefer to have great flexibility in the choice of national instruments to correct market failures. This is mainly because they need to balance the economic characteristics of alternative measures against their political acceptability. By contrast, the trade rules embodied in the WTO agreements presuppose a world of market economies and attempt to discipline government failures that lead to economic distortions with the flavour of mercantilism and protectionism. Such fundamental differences underlying the two regimes entail potential for conflicts.⁶

As climate policy has become a major international policy field, its standing vis-à-vis the well-established WTO regime is changing rapidly, with climate policy makers increasingly becoming apprehensive that WTO law is curtailing their room for maneuver to implement domestic climate policies effectively.⁷ On the other hand, concerns have also been raised by some countries about the use of trade-related climate measures for 'alleged' protectionist purposes.⁸ The significant surge in WTO disputes pertaining to climate change and clean

⁵ Clara Brandi, *Trade Elements in Countries' Climate Contributions under the Paris Agreement*, INTERNATIONAL CENTRE FOR TRADE AND SUSTAINABLE DEVELOPMENT (ICTSD) (2017).

⁶ G.C. Hufbauer & J. Kim, *The World Trade Organization and Climate Change: Challenges and Options*, PETERSON INSTITUTE FOR INTERNATIONAL ECONOMICS (2009), at 5.

⁷ See, e.g. Henry Derwent, *What Has Climate to Fear from Trade?* THE E15 INITIATIVE, ICTSD AND WORLD ECONOMIC FORUM (2015).

⁸ See, e.g. M. Khor, *Challenges of the Green Economy Concept and Policies in the Context of Sustainable Development, Poverty and Equity (n.d.)*, <http://purochioe.rrojasatabank.info/transition-4.pdf>

energy over the past several years⁹ is indicative of the tension that is increasingly brewing up in the interface between national climate policies and measures on the one hand and international legal regimes pertaining to trade, on the other. With the increasing importance of national measures following the adoption of the Paris Agreement, synergies and conflicts can be expected to change over time.

Leaving the fate of climate-related actions to the WTO dispute settlement system is an option that is associated with risks and uncertainty, and could lead to a chilling effect on investment in the sector. Ensuring coherence between trade and climate policy has also become more important in the context of regional and so-called ‘mega-regional’ trade agreements.¹⁰ Hence, it is important to explore the various ways in which trade policies and frameworks could create a more favorable environment for advancing the objectives of the Paris Agreement and their implementation. The inclusion of environmental and climate policy provisions in regional trade agreements (RTAs) further shows that there is a demand for policy coordination.

There is no dearth of options in this regard. For instance, the E15 Expert Group on Measures to Address Climate Change and the Trade System, convened by the International Centre for Trade and Sustainable Development and the World Economic Forum, produced a report that listed 24 different policy options.¹¹ Many other suggestions can be found in the literature, ranging from options that are ‘general’ to others that focus on specific issues at the intersection of trade and climate (e.g. border carbon adjustments (BCAs), energy subsidies, climate-friendly technologies).¹² However, in many cases, these options are only briefly discussed, and the existing literature does not offer a systematic assessment of their feasibility.

The importance of analysing options in the light of real-world constraints is underscored by geopolitical developments. Suggestions to address climate change through the WTO already faced an uphill battle in the context of broader disagreements on the future of the Doha Round (which did not explicitly include a mandate to address climate change).¹³ However, there are more fundamental challenges to the WTO, such as increasing protectionism in the form of tariffs imposed unilaterally by the United States, followed by retaliatory measures by US trading partners,¹⁴ and ongoing uncertainty about Appellate Body judges’ appointments.¹⁵ These may also challenge the feasibility of any changes oriented to climate policy.

This article systematically discusses policy options for trade and climate policymakers. Based on a literature review and our own understanding, and in light of interviews with 26 experts (listed in Annex 2), we have identified 22 options for further analysis. These include ‘general options’ addressing the link between trade and climate change, as well as options

⁹ For a list of recent disputes see Susanne Droege, Harro van Asselt, Kasturi Das & Michael Mehling, *The Trade System and Climate Action: Ways Forward under the Paris Agreement*, CLIMATE STRATEGIES (2016) at 52.

¹⁰ Harro van Asselt, *Climate Change and Trade Policy Interaction: Implications of Regionalism* (Organisation for Economic Co-operation and Development, Trade and Environment Working Papers No. 2017/03, 2017).

¹¹ James Bacchus, *Global Rules for Mutually Supportive and Reinforcing Trade and Climate Regimes*, THE E15 INITIATIVE, ICTSD AND WORLD ECONOMIC FORUM (2016).

¹² For a review, see Susanne Droege, Harro van Asselt, Kasturi Das & Michael Mehling, *supra* note 10.

¹³ The disagreements are captured by World Trade Organization, Nairobi Ministerial Declaration, WTO Doc. WT/MIN(15)/DEC (December 21, 2015), para. 30: ‘We recognize that many Members reaffirm the Doha Development Agenda, and the Declarations and Decisions adopted at Doha and at the Ministerial Conferences held since then, and reaffirm their full commitment to conclude the [Doha Development Agenda] on that basis. Other Members do not reaffirm the Doha mandates, as they believe new approaches are necessary to achieve meaningful outcomes in multilateral negotiations. Members have different views on how to address the negotiations. We acknowledge the strong legal structure of this Organization.’

¹⁴ See, e.g., D. Rushe, *China Retaliates Against Trump’s \$50bn in Tariffs, Escalating Possibility of Trade War*, THE GUARDIAN, June 15, 2018.

¹⁵ US Continues to Block Appointment of New AB Members, TWN INFO SERVICE ON WTO AND TRADE ISSUES, April 3, 2018 <<https://www.twn.my/title2/wto.info/2018/ti180401.htm>>.

specifically related to border carbon adjustments (BCAs) and fossil fuel subsidies. Each of the proposals is analysed with a focus on their political feasibility in the short term.¹⁶ In addition, where possible, we examine factors that may increase the utility and desirability of options, including their potential for reducing legal uncertainty.

The article is structured as follows. Section II provides a brief overview of the trade and climate policy regime to set the context. Section III offers a detailed discussion of each of the 22 proposed options, with a focus on their political feasibility in the short term. Section 4 discusses and summarises the key findings, and offers some recommendations for trade and climate policymakers.

II. THE CLIMATE AND TRADE REGIMES: AN OVERVIEW

A. *The Climate Regime*

The UNFCCC was adopted in 1992 at the Rio Conference on Environment and Development. With 196 parties, it has nearly universal participation. It sets out the main objective of the climate regime as “stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system”.¹⁷ However, the Convention did not specify the legal obligations to achieve this objective. In 1995, parties started negotiating a protocol to stipulate mitigation targets for developed countries. This led to the adoption of the Kyoto Protocol in 1997, which now has 192 parties. The Protocol requires industrialized countries to collectively reduce average greenhouse gas emissions by 5.2% during 2008-2012 (i.e. the first commitment period), compared to 1990 levels. As an innovation, it introduced several market-based instruments (“flexible mechanisms”) to allow for cost-effective mitigation. While developing countries have signed and ratified the Kyoto Protocol they do not have any concrete obligations to reduce their emissions. With the 2012 Doha Amendment to the Kyoto Protocol, parties agreed on a new commitment period for 2013-2020. However, the amendment has yet to enter into force.

Throughout the history of the climate regime, a recurring question has been who should take action to reduce greenhouse gas emissions, and how the effort to address climate change should be shared. The UNFCCC establishes the principle of common but differentiated responsibilities and respective capacities, which was initially translated into a bifurcated division of Annex I (developed countries) and non-Annex I countries (developing countries). This approach was also followed in the Kyoto Protocol, which only required Annex I countries to mitigate emissions. As the pressure to broaden participation of countries – particularly major emerging economies such as China, which surpassed the United States as the world’s largest emitter in the late 2000s – in mitigation efforts rose fast, parties launched negotiations on a new climate treaty under the UNFCCC with the Bali Road Map in 2007. The purpose of a new agreement was to establish a genuinely global effort for long-term climate policy. After the 15th UNFCCC Conference of the Parties (COP) in Copenhagen 2009 did not succeed in adopting a new global agreement, it took another six years of negotiations to find a consensus in Paris at COP21.

The Paris Agreement was adopted by the 197 parties to the UNFCCC on 12 December 2015. The Paris Agreement entered into force on 4 November 2016, i.e. thirty days after the

¹⁶ Defined in this article as five years or less.

¹⁷ U.N. Framework Convention on Climate Change, *United Nations Framework Convention on Climate Change*, U.N. Doc. FCCC/INFORMAL/84 (1992) <<https://unfccc.int/resource/docs/convkp/conveng.pdf>>.

date on which the threshold for the entry into force was achieved which required at least 55 Parties to the Convention accounting in total for at least an estimated 55% of the total global greenhouse gas emissions to deposit their instruments of ratification, acceptance, approval or accession with the Depositary. To date, out of 197 UNFCCC parties 180 have ratified the Agreement.¹⁸

The purpose of the Paris Agreement is threefold: (1) to limit the global average temperature increase to “well below” 2 degrees Celsius above pre-industrial levels and “to pursue efforts” to achieve 1.5 degrees Celsius; (2) to enhance the ability to adapt to climate change, to increase the resilience and to establish low-greenhouse gas development; (3) to make financial flows consistent with a low emissions pathway and climate resilient development. Unlike the Kyoto Protocol, its predecessor, the core obligations under the Paris Agreement apply universally to *all* UNFCCC parties, and not just developed country parties.¹⁹ The Paris Agreement requires all parties to prepare and communicate nationally determined contributions (NDCs) which will have to be reviewed and updated every five years, with each new NDC required to be more ambitious than the previous one. The Agreement further specifies actions in the area of adaptation, as well as obligations related to the “means of implementation” (i.e. financial, technological, and capacity-building support). Although the contents of NDCs are up to parties, the Agreement puts in place several mechanisms to review implementation and progress made, including a transparency framework to review implementation of the NDCs, a mechanism to facilitate implementation and promote compliance, and a five-yearly global stocktake to review collective progress.

The UNFCCC and the Kyoto Protocol both include explicit references to trade policy concerns. The language used is partly identical to that found in the General Agreement on Tariffs and Trade (GATT; see below),²⁰ aiming at preventing protectionist applications of climate policy measures. The Paris Agreement, by contrast, does not contain any references to trade, due mainly to diverging positions of developed and developing countries. Following the Bali Action Plan in 2007, proposals by developing countries surfaced to include text in an international agreement that would prohibit developed countries from using unilateral trade measures on climate grounds. However, such proposals were usually accompanied by counter-proposals by developed countries to include no text on the issue at all.²¹

To offer institutional space for discussing such critical issues, parties created a forum on the impact of the implementation of response measures in 2010.²² As the Paris Agreement does not give guidance on trade and climate change, the forum is the primary institutional space for ongoing discussions on trade-related concerns in the context of the UNFCCC.²³ The work

¹⁸ See <<https://unfccc.int/process/the-paris-agreement/status-of-ratification>>

¹⁹ U.N. Framework Convention on Climate Change, *supra* note 1.

²⁰ Article 3.5 of the U.N. Framework Convention on Climate Change, *supra* note 18, states that climate policy measures should not “constitute a means of arbitrary or unjustifiable discrimination or a disguised restriction on international trade”.

²¹ Harro van Asselt, *The Fragmentation of Global Climate Governance: Consequences and Management of Regime Interactions* (2014). Also see N. Chan, *The ‘New’ Impacts of the Implementation of Climate Change Response Measures*, 25/2 *Review of European, Comparative and International Environmental Law* 228 (2016).

²² U.N. Framework Convention on Climate Change, *Report of the Conference of the Parties on its sixteenth session, held in Cancun from 29 November to 10 December 2010, Addendum, Part Two: Action taken by the Conference of the Parties at its sixteenth session, The Cancun Agreements: Outcome of the work of the Ad Hoc Working Group on Long-term Cooperative Action under the Convention*, U. N. Doc. FCCC/CP/2010/7/Add.1 - Decision 1/CP.16 (March 15, 2011), paras. 88-94 <<https://unfccc.int/resource/docs/2010/cop16/eng/07a01.pdf>>

²³ See R. Bodle, L. Donat, L. and M. Duwe, *The Paris Agreement: Analysis, Assessment and Outlook*, Umweltbundesamt, *Background Paper for the Workshop “Beyond COP21: What Does Paris Mean for Future of Climate Policy?”* (2016) at 10 <<http://>

of the forum needs to take into account “all relevant policy issues of concern”.²⁴ Although the work programme of the forum does not directly tackle the climate-trade overlap, technical work on assessing the impacts of response measures suggests that trade-related impacts will be considered.²⁵ In particular, the UNFCCC guidance on the impact assessment of response measures on developing countries mentions trade impacts from tariffs and border carbon adjustments (BCAs).²⁶

B. The World Trade Regime

1. The WTO

The origins of the world trade regime date back to 1947, when the General Agreement on Tariffs and Trade (GATT) was adopted. Nearly half a century later, the WTO was established, following the conclusion of the Uruguay Round of trade negotiations (1986-1994). The WTO, with its 164 members, is the institutional umbrella of a series of six sub-categories of agreements, including 14 agreements on trade in goods (e.g. GATT), and five other types of agreements, such as the General Agreement on Trade in Services (GATS) and the Agreement on Trade-related Aspects of Intellectual Property Rights (TRIPS).²⁷

The key objective of the GATT was to promote the liberalisation of trade in goods for the benefit of its members. It sets out a number of trade principles, most notably that trade measures imposed by a member shall not discriminate between different trade partners (known as the most-favoured nation (MFN) obligation; Article I).²⁸ Neither shall they discriminate against imported goods from other members vis-à-vis “like” domestic goods (the national treatment obligation; Article III).

Although initial rounds of trade talks under the GATT were devoted to bringing down tariffs, later negotiation rounds (starting with the Tokyo Round, 1973-1979) broadened the scope to non-tariff barriers, such as import licensing, rules of origin, and investment measures. Over time, the multilateral trade regime came to cover new areas, such as services (through the GATS), intellectual property rights (through the TRIPS Agreement), technical standards (through the Agreement on Technical Barriers to Trade, TBT), and subsidies (through the Agreement on Subsidies and Countervailing Measures, SCM).

ecologic.eu/sites/files/event/2016/ecologic_institute_2016_paris_agreement_assessment_0.pdf> Also see N. Chan, *supra* note 22.

²⁴ U.N. Framework Convention on Climate Change, *Report of the Conference of the Parties on its twenty-first session, held in Paris from 30 November to 13 December 2015, Addendum, Part two: Action taken by the Conference of the Parties at its twenty-first session, Forum and work programme on the impact of the implementation of response measures*, U.N. Doc. FCCC/CP/2015/10/Add.2, Decision 11/CP.21 (January 29, 2016) <<https://unfccc.int/resource/docs/2015/cop21/eng/10a02.pdf>>

²⁵ For the work programme, see <http://unfccc.int/cooperation_support/response_measures/items/7418.php>

²⁶ U.N. Framework Convention on Climate Change, *Guidance to Assist Developing Country Parties to Assess the Impact of the Implementation of Response Measures, including Guidance on Modelling Tools, Guidance to assist developing country Parties to assess the impact of the implementation of response measures, including guidance on modelling tools, Technical paper by the secretariat*, U.N. Doc. FCCC/TP/2016/4 (April 28, 2016) <<http://unfccc.int/resource/docs/2016/tp/04.pdf>> Section III, A 36 (e), at 8.

²⁷ World Trade Organization, *Agreement on Establishing the WTO (1995)* <https://www.wto.org/english/docs_e/legal_e/04-wto.pdf>.

²⁸ More specifically, a WTO member is obliged to provide to another WTO member treatment which is no less favorable than what it accords to any other country, irrespective of whether that country is a WTO member.

An important feature of the WTO is its strong dispute settlement mechanism, which extends the GATT's practice.²⁹ Under the integrated system of dispute settlement created alongside the WTO, the same dispute settlement rules apply to disputes under virtually all WTO agreements, subject to any special or additional rules in an individual agreement.³⁰ The politically desirable outcome of a dispute is a resolution of the conflict through consultations, or, more generally, a solution mutually acceptable to the parties to the dispute. If this is not possible, the primary objective of the process is to withdraw the measure under contention, with compensation and retaliation being avenues of last resort.³¹ In contrast to the GATT's diplomatic norms, which were criticized for lacking the "teeth" necessary to ensure compliance, the dispute settlement mechanism has been described as being "the most developed dispute settlement system in any existing treaty regime".³² The system has been used intensively since the WTO came into being. The total of more than 500 disputes over the 20-year history of the WTO contrasts with the total of 300 disputes brought under the dispute settlement system of the GATT — the predecessor to the WTO — over a period of 47 years (1947-1994).³³

In 2001, a new round of trade talks, known as the Doha Development Round, was launched to expressly address issues of importance to developing countries. The Doha Round includes negotiations on the reduction or elimination of tariffs and non-tariff barriers on environmental goods and services, and paragraph 31 of the Doha Ministerial Declaration acknowledges the relationship between existing WTO rules, and specific trade obligations set out in multilateral environmental agreements. The Doha Round negotiations use a "single undertaking" approach, where countries agree on all issues together. This prevents countries from cherry-picking issues, but makes consensus more challenging. The Doha Round largely came to a halt in 2008, and little progress has been made since then. Nevertheless, WTO members managed to reach agreement on the 2013 "Bali package" (covering trade facilitation, food security in developing countries, and cotton trade), and the 2015 "Nairobi package" (including an agreement to eliminate agricultural export subsidies). However, at the Nairobi Ministerial in 2015 important disagreements persisted among WTO members on the best way forward, leading to a stalemate in the trade talks.³⁴ Again Buenos Aires Ministerial Conference of 2017 failed to reach any new agreement.³⁵

In contrast with its apparently diminishing relevance in new rule-making for international trade, the WTO's dispute settlement system is still a very strong institutional tool, and is used regularly by members. Given concerns about climate policy measures' potential to violate WTO rules, dispute settlement takes a key role in providing legal clarity in cases of conflict.

²⁹ World Trade Organization, *supra* note 28, at Art. III.

³⁰ The WTO's Dispute Settlement Understanding specifies the scope of jurisdiction of the WTO dispute settlement mechanism, limiting it to the "covered agreements" listed in Article 1.1 World Trade Organization, *Understanding On Rules and Procedures Governing the Settlement Of Disputes* (1995) <https://www.wto.org/english/docs_e/legal_e/28-dsu.pdf>.

³¹ D. T. Shedd, B. J. Murrill and J. M. Smith, *Dispute Settlement in the World Trade Organization (WTO): An Overview* (Congressional Research Service, CRS Report for Congress, 2012) <<https://www.fas.org/sgp/crs/misc/RS20088.pdf>>

³² D. Palmeter, The WTO as a Legal System, 24/1 *FORDHAM INT'L L.J.* 444 (2000).

³³ See <https://www.wto.org/english/res_e/booksp_e/anrep_e/anrep16_chap6_e.pdf>.

³⁴ *Overview of Outcomes of WTO's 10th Ministerial in Nairobi*, 5 *BRIDGES DAILY UPDATES*, 2015, <<http://www.ictsd.org/bridges-news/bridges/news/bridges-daily-update-5-overview-of-outcomes-of-wto%E2%80%99s-10th-ministerial-in>>

³⁵ <<https://in.reuters.com/article/trade-wto/wto-meeting-ends-in-discord-ministers-urge-smaller-scale-trade-talks-idINKBN1E71J1>>

By contrast, the number of RTAs has risen sharply. RTAs, of which mega-regional agreements are a sub-category, have to be notified to the WTO in accordance with Article XXIV GATT. In addition, under the WTO umbrella, there are stand-alone plurilateral agreements including plurilateral agreements that extend concessions to all WTO members on an MFN basis once a critical mass is reached. The ongoing negotiations on a plurilateral Environmental Goods Agreement fall in the latter category, meaning that the benefits of the agreement will eventually be extended to all WTO Members once a critical mass is reached.

Environmental concerns are acknowledged in the preamble to the 1995 Agreement Establishing the WTO, which contextualises the goals of the trade regime so as to “[allow] for the optimal use of the world’s resources in accordance with the objective of sustainable development”.³⁶ The WTO’s Committee on Trade and Environment (CTE) offers the institutional setting for elaborating the relationship between trade measures and environmental measures and for promoting sustainable development within the WTO. The CTE is open to all WTO Members, as well as observers from intergovernmental organisations, including the UNFCCC Secretariat. Although climate change hardly featured in WTO discussions until 2007, under the leadership of WTO Director-General Pascal Lamy (2005-2013) the organisation became actively involved in discussions on the climate and trade interface, notably leading to a joint report with the United Nations Environment Programme on the subject in 2009.³⁷ Since the 1990s, the interface between trade and the environment – including, more recently, climate change – has come to the fore primarily through GATT/WTO case law, with a surge in WTO disputes in the area of climate and clean energy over the recent past. The implementation of the Paris Agreement with nationally driven climate action as a key approach, is likely to lead to further demand for discussing and clarifying how the regimes could interact in a productive way.

2. Regional Trade Agreements

Already during the Uruguay Round of trade negotiations, many GATT Parties turned to regional or bilateral trade agreements. The formation and strengthening of major trade blocs in the Americas (the North American Free Trade Agreement (NAFTA) and Mercado Común del Sur (MERCOSUR)) and Europe in the late 1980s and early 1990s meant that other countries were incentivised to either join or to establish their own agreements.³⁸ Against the backdrop of globalisation, RTAs were perceived to help enhance market access, promote foreign policy objectives and influence the policies of trading partners.³⁹ As a result, the number of RTAs has increased significantly in the last two decades, leading to a “spaghetti bowl” of trade agreements.⁴⁰ WTO members are obliged to notify the RTAs in which they participate. Interestingly, all of the WTO’s Members have notified participation in one or more RTAs, with some of them being parties to 20 or more RTAs. As of 1 May 2018, the WTO had received 459 notifications on RTAs from the Members, counting goods, services and accessions separately. Out of them 287 RTAs were in force.⁴¹

³⁶ World Trade Organization, *supra* note 28.

³⁷ L. Tamiotti, R. Teh, V. Kulaçoğlu, *et al.*, *Trade and Climate Change: A Report by the United Nations Environment Programme and the World Trade Organization* (World Trade Organization and United Nations Environment Programme, 2009).

³⁸ R. E. Baldwin, *The Causes of Regionalism*, 20/7 THE WORLD ECONOMY 865 (1997).

³⁹ T. Carpenter, A Historical Perspective on Regionalism, in MULTILATERALIZING REGIONALISM (P. Low and R. E. Baldwin eds., 2009).

⁴⁰ J. Bhagwati, *Regionalism versus Multilateralism*, 15/5 THE WORLD ECONOMY 535 (1992).

⁴¹ See <https://www.wto.org/english/tratop_e/region_e/region_e.htm#facts>.

In recent years, the discussion of regionalism in the trade context has taken a new turn with the emergence of the so-called “mega-regional” agreements.⁴² Negotiations on the EU-Canada Comprehensive Economic and Trade Agreement (CETA) were concluded in August 2014. On 21 September 2017 CETA entered into force provisionally.⁴³

The Trans-Pacific Partnership (TPP) – involving Australia, Brunei, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore, the United States and Vietnam - was signed in February 2016. The goal of Barack Obama, who championed TPP, was that TPP would “write the rules for global trade”. But President Trump, on his first full day in office, signed an executive order withdrawing the United States from the TPP. As the 12 became 11, with the largest party leaving it was initially feared that the deal was dead. However, later remaining 11 members revived the talks resulting in the Comprehensive and Progressive Agreement for Trans-Pacific Partnership, or CPTPP deal getting signed by the 11 countries on 8 March 2018 in Santiago, Chile.⁴⁴ The 11 members of CPTPP constitute 13.5% of the world economy.⁴⁵ On 19 July 2018, Singapore became the third country to ratify the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP), following Mexico and Japan. CPTPP will enter into force 60 days after at least six of its eleven signatories ratify it.⁴⁶

The negotiations for another mega-regional, the Transatlantic Trade and Investment Partnership (TTIP) between the European Union (EU) and the United States (US) got stalled, but is still not abandoned.⁴⁷

Another mega-regional under negotiation which is backed by China that left out the U.S. from the very beginning is the Regional Comprehensive Economic Partnership (RCEP), involving ten ASEAN members, along with China, Japan, South Korea, India, Australia and New Zealand. The 16-nation Regional Comprehensive Economic Partnership (RCEP), which will cover about half the world's population and a third of its GDP, has taken center stage as Washington embarks on a unilateral, protectionist agenda. Broad agreement on what would be the world's biggest free trade deal is expected to be reached at a leaders' summit in Singapore in November, 2018.⁴⁸

The mega-regionals are not only important because of the parties involved – which include some of the world's major nations – in terms of GDP and trade – but also because of their expansive scope, which covers not only market access, but also regulatory coherence. Given their scope and membership, the success or failure of mega-regionals may have influence on multilateral rule-making. Success means that future multilateral rules may be modelled after

⁴² Mega-regionals have been defined as “deep integration partnerships in the form of RTAs between countries or regions with a major share of world trade and [foreign direct investment] and in which two or more of the parties are in a paramount driver position, or serve as hubs, in global value chains”; WORLD ECONOMIC FORUM, MEGA-REGIONAL TRADE AGREEMENTS: GAME-CHANGERS OR COSTLY DISTRACTIONS FOR THE WORLD TRADING SYSTEM? (2014) AT 13, <http://www3.weforum.org/docs/GAC/2014/WEF_GAC_TradeFDI_MegaRegionalTradeAgreements_Report_2014.pdf>.

⁴³ <<http://ec.europa.eu/trade/policy/in-focus/ceta>>.

⁴⁴ See <<https://dfat.gov.au/trade/agreements/not-yet-in-force/tpp-11/Pages/trans-pacific-partnership-agreement-tpp.aspx>>.

⁴⁵ See <<https://www.economist.com/the-economist-explains/2018/03/12/what-on-earth-is-the-cptpp>>.

⁴⁶ See <<https://www.lexology.com/library/detail.aspx?g=d800812e-6adf-4009-bc15-9816982c05b8>>.

⁴⁷ See <<https://www.bloomberg.com/news/articles/2018-03-29/trump-willing-to-reopen-ttip-amid-eu-u-s-trade-spat-ross-says>>.

⁴⁸ See <<https://www.rappler.com/world/regions/asia-pacific/210934-deal-china-backed-rcep-trade-pact-likely-november-says-singapore>>.

the mega-regionals.⁴⁹ Success may also lead to fewer RTAs, helping to clean up the ‘Spaghetti Bowl’.⁵⁰ However, success is not guaranteed, as the various mega-regionals have come under significant scrutiny, partly triggered by civil society demands for transparency, partly by political opposition.

Environmental provisions have become increasingly prevalent in RTAs. NAFTA set the stage by including a side-agreement, the North American Agreement on Environmental Cooperation, with other US RTAs following suit. The EU also started to incorporate environmental provisions in its RTAs with third countries since the mid-1990s. EU trade agreements with third countries are also linked to an increasing number of multilateral environmental agreements, whereas US trade agreements have become increasingly specific about the environmental action required, backed up by consultations and dispute-settlement procedures in the agreement.⁵¹ The trend of including environmental provisions is continuing also in the negotiation of mega-regionals.

3. The Interactions Between the Regimes

With the adoption of the Paris Agreement, the climate regime has witnessed an evolution towards a universal regime, which requires mitigation efforts from all parties, but leaves open what kind of action parties undertake. The shift towards a more “bottom-up” approach to international climate policy holds potential implications for trade, as the resulting flexibility allows for a variety of measures that could have trade implications and for which a supportive trade policy setting would be helpful.

The international trade regime has also undergone important changes in recent years. Although a well-established system of trade rules has been in place for over 20 years, and WTO members now include the world’s major trading nations, the single-undertaking approach that led to the WTO in the first place has created difficulties. Flanked by an increasing number of RTAs and, more recently, new mega-regional agreements, the relevance and dominance of the WTO in setting international trade rules has been challenged. The situation has been further worsened by President Trump’s repeated threat to pull the U.S. out of the WTO.⁵² The U.S. has also blocked appointment of WTO appellate body judges putting the WTO Dispute Settlement System into troubled water.

The present scenario may offer both opportunities and risks for global climate protection, because there is a lack of guidance on the one hand, and space for new mutually supportive rules on the other. The two regimes have so far co-existed without creating severe frictions.⁵³ However, this may not be the case in the future, with the recent emergence of a number of climate-related disputes. At the same time, the fact that both regimes find themselves at crossroads may also lead to new opportunities to create rules and procedures that lead to benefits for climate change, trade, and development.

⁴⁹ R.E. Baldwin, *Multilateralising 21st Century Regionalism*, OECD Global Forum on Trade (2014), <<https://www.oecd.org/tad/events/OECD-gft-2014-multilateralising-21st-century-regionalism-baldwin-paper.pdf>>.

⁵⁰ WORLD ECONOMIC FORUM, *supra* note 43, at 26.

⁵¹ S. Jinnah and E. Morgera, *Environmental Provisions in American and EU Free Trade Agreements. A Preliminary Comparison and Research Agenda*, 22/3 REV. EUR., COMP. & INT’L ENVTL. L. 324 (2013).

⁵² See <<https://www.bbc.com/news/world-us-canada-45364150>>.

⁵³ van Asselt, *supra* note 22 at 166. Also see R. Eckersley, UNDERSTANDING THE INTERPLAY BETWEEN THE CLIMATE AND TRADE REGIMES IN CLIMATE AND TRADE POLICIES IN A POST-2012 WORLD (B. Simmons, H. van Asselt, F. Zelli et al. eds., 2009).

III. ASSESSING THE OPTIONS

This section discusses a list of 22 policy options to make the international trading system more supportive of climate action in line with the Paris Agreement.

Our aim was to identify a set of policy options and undertake a systematic analysis of each of them from the point of view of their political feasibility. The options analysed and presented in this article belong to the following five categories:

- (1) Legal changes at the WTO options that focus on increasing the trade system's supportiveness of climate action in general, rather than in the context of any specific issue;
- (2) Procedural changes and practices within and between the WTO- and the UNFCCC-systems;
- (3) Actions under Plurilateral and Regional Trade Agreements;
- (4) options that focus specifically on implementation of border carbon adjustments; and
- (5) options that deal specifically with the phase-out and reform of fossil fuel subsidies.

The first three categories look into proposals 'in general', rather than in the context of any specific issue, the subsequent two categories focus on the more specific issue areas of border carbon adjustments (Category 4) and fossil fuel subsidies (Category 5).

In this section we briefly present and explain each of the 22 options. We have analysed and assessed the political feasibility in the light of (a) existing academic and policy literature; (b) official documents; (c) insights obtained in expert interviews (see Annex 2 for the list of interviewees); and finally (4) our own understanding. As such, we are solely responsible for the views, perspectives, and judgements presented in this article.

A. Category 1: Legal Changes at the WTO

Recent years have seen a surge in WTO disputes targeting domestic support and policy measures related to clean energy, leading to potential contradictions between the trade regime and climate action.⁵⁴ One argument in favour of reforming WTO rules is that the case-by-case nature of WTO disputes does not provide sufficient structural legal guidance for the implementation of NDCs under the Paris Agreement, and leaves the settlement of climate-related disputes to a body that is guided first and foremost by the rules of the multilateral trading system.⁵⁵ If the demand for legal guidance increases, there are several ways in which WTO Members could provide it.⁵⁶ In this regard, we consider a set of four 'general' policy options relating to changes in the WTO law.⁵⁷

Option 1A: Amending the text of the WTO Agreements to explicitly accommodate climate change measures or measures taken pursuant to the Paris Agreement

The procedures to be followed for amending WTO Agreements can be found in Article X of the Agreement Establishing the WTO. According to this provision, the Ministerial Conference (MC) receives a proposal for an amendment by a WTO Member or one of the three specialised

⁵⁴ Susanne Droege, Harro van Asselt, Kasturi Das & Michael Mehling, *The Trade System and Climate Action: Ways Forward under the Paris Agreement*, 13 S.C. J. INT'L L. & BUS. 195 (2017), at 52-55.

⁵⁵ Bacchus, *supra* note 12, at 13-14.

⁵⁶ Droege *et al.*, *supra* note 55, at 27.

⁵⁷ Drawing primarily on Susanne Droege, *et al.* *supra* note 55.

Councils (Goods, Services, TRIPS). The MC is given a period of at least 90 days to try and reach consensus on the proposal. If consensus is not reached by the stipulated timeframe, the MC may decide by a two-thirds majority of Members to submit the proposal to Members for acceptance in accordance with their ratification procedures. The amendment, in general, takes effect after two thirds of Members have ratified it. For certain specified provisions, amendments take effect only upon acceptance by all Members.

An amendment, if ratified by all WTO Members, can permanently alter their WTO obligations. An amendment could reduce the legal uncertainty confronting climate policies and measures deriving from the case-by-case nature of the WTO dispute settlement system. With an amendment clarifying the legal scope of trade-related climate measures, the frequency of disputes in this area is likely to reduce. This would ease the burden on the WTO dispute settlement system, which is already overburdened, while facilitating normative coherence between the trade and climate regimes.⁵⁸

The flipside, however, is that the *modus operandi* of an amendment in WTO law is highly complex (as detailed above), and any amendment will likely take long to come into force.⁵⁹ Submitting an amendment itself needs consensus, and depending on the content (and the specific treaty provision it applies to), it will require the acceptance of at least two-thirds of the Members, and in some cases even of all Members to come into effect. Another major challenge is that WTO amendments, in general,⁶⁰ are binding only on those Members that ratify them, and not on all Members. For any WTO Member that does not accept an amendment, the un-amended WTO rules would still apply, and that Member could bring and win a dispute against any climate change or renewable energy measure that violates the un-amended rules.⁶¹ Not surprisingly, amendments have hardly been used in WTO practice so far.⁶² Negotiating an amendment for climate purposes will be highly challenging. Even if the procedural barriers to its adoption could be overcome, it would still be difficult to reach agreement on its formulation.

For these reasons, the political feasibility of an amendment is very low in the short term.⁶³ In addition, adopting an amendment on a topic that is still controversial at a time when overall decision-making in the WTO is proving to be challenging will likely be difficult.

Option 1B: Adopting a waiver relieving WTO Members from legal obligations under the WTO Agreements

A second legal window available within the WTO is the ‘waiver’ provision of Article IX.3 of the Agreement Establishing the WTO. Request for waivers is to be submitted to the relevant sectoral Councils (Goods, Services, TRIPS). The request has to specify the proposed measure, underlying policy objectives, and explain as to what prevents application of GATT-compliant measures. After up to 90 days the relevant Council has to submit a report to the MC or the General Council. Although the decision may be adopted by a three-fourths majority, in practice

⁵⁸ H. van Asselt, F. Sindico, & M. A. Mehling, *Global Climate Change and the Fragmentation of International Law*, 30 LAW & POL’Y 423 (2008) at 440.

⁵⁹ The sole case of an amendment of WTO law (a compulsory licensing provision related to public health in the TRIPS Agreement) was adopted in 2005, but only came into effect in 2017. See <https://www.wto.org/english/tratop_e/trips_e/amendment_e.htm>.

⁶⁰ Only a few amendments that do not alter the rights and obligations of Members take effect for all Members.

⁶¹ A. Porges and T. L. Brewer, *Climate Change and a Renewable Energy Scale-up: Responding to Challenges Posed to the WTO*, INTERNATIONAL CENTRE FOR TRADE AND SUSTAINABLE DEVELOPMENT (2014), at 1.

⁶² The only exception has been an amendment to the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS), see <https://www.wto.org/english/tratop_e/trips_e/amendment_e.htm>.

⁶³ Interviews 1–11.

waiver decisions are adopted by consensus. The decision granting a waiver may specify terms and conditions that the Member to whom the waiver is being granted must fulfil. Notably, waivers exceeding one year are subject to annual review wherein any extension, modification or termination may be decided by a simple majority. Waivers exceeding one year must undergo a review by the MC within one year since it is granted, and thereafter annually until the waiver terminates. In each such review, the MC is required to examine whether the exceptional circumstances justifying the waiver still exist and whether the terms and conditions attached to the waiver have been met. The MC, on the basis of the annual review, may extend, modify or terminate the waiver by a simple majority.

A waiver enables WTO Members to lawfully take measures which, in the absence of the waiver, might be judged as violating WTO law.⁶⁴ However, a waiver can be used only under ‘exceptional circumstances’ and for a limited period of time, as specified in the waiver decision. Waivers are also subject to well-specified terms and conditions.

Waivers have been extensively used by the WTO.⁶⁵ Notable among them are the Kimberley Waiver on ‘blood diamonds’, which waived certain provisions of the General Agreement on Tariffs and Trade (GATT) to allow the participants to the Kimberley Process to ban trade with non-participants in rough diamonds.⁶⁶ Another example is the TRIPS Waiver on compulsory licensing, which waived certain TRIPS requirements regarding compulsory licensing for facilitating access to medicines to countries lacking manufacturing capacity.⁶⁷ Incidentally, both these waivers were granted in 2003.

The granting of a waiver is a simple and flexible method for relieving a WTO Member or all WTO Members from a particular WTO obligation. The waiver decision becomes legally effective as soon as it is adopted by the MC. Feichtner points out that a waiver allows for a general modification of WTO rules in the direction of non-economic interests. More precisely, it restricts the WTO’s jurisdiction in favour of ‘other international legal regimes which may have greater competence and legitimacy than the WTO to deal with certain issues’,⁶⁸ and which actually have a legal mandate that affects trade.⁶⁹ Climate change-related interests may fit the bill.

However, waivers also have several disadvantages. For instance, they can work as a defence against existing obligations but cannot create additional obligations to those set out in the WTO Agreements. All waivers are temporary, and, in general, have a specific expiration date.⁷⁰ Waivers exceeding one year are subject to annual review during which they can be extended, modified or terminated by a simple majority. As waivers cannot provide a permanent and definitive reduction of a WTO obligation, this may result in an endless, contentious debate

⁶⁴ James Bacchus, *The Case for a WTO Climate Waiver*, CENTRE FOR INTERNATIONAL GOVERNANCE INNOVATION (2017), at 22.

⁶⁵ For a list of waivers granted by General Council and by the Ministerial Conference between 1995 and 2015, see General Council, *Waivers 1995 – 2015: Note by the Secretariat*, WTO Doc. WT/GC/W/718 (June 27, 2016).

⁶⁶ This was to clarify that trade actions taken against non-participant WTO Members to help suppress trade in conflict or blood diamonds under the Kimberley Process Certification Scheme for Rough Diamonds are justified under the GATT (General Council, *Waiver Concerning Kimberley Process Certification Scheme for Rough Diamonds*, Decision of 15 May 2003, WTO Doc. WT/L/518 (May 27, 2003)).

⁶⁷ General Council, *Implementation of Paragraph 6 of the Doha Declaration on the TRIPS Agreement and Public Health*, Decision of 30 August 2003, WTO Doc. WT/L/540 (September 2, 2003).

⁶⁸ I. Feichtner, *The Waiver Power of the WTO, Opening the WTO for Political Debate on the Reconciliation of Competing Interests*, 20 EUR. J. INT’L L. 615 (2009) at 645.

⁶⁹ Feichtner, *supra* note 69 at 618.

⁷⁰ The only exception is the waiver on TRIPS and public health, which states that it will terminate for each Member only on the date when an amendment to the TRIPS Agreement replacing its provisions enters into effect for that Member (General Council, *supra* note 68).

every year at the time of review. As opposed to the temporary character of a waiver, climate change poses long-term challenges, and the policies required to reduce emissions need to be long-term too. The built-in uncertainty of the waiver approach may therefore not provide the much-needed predictability to climate policy makers and other stakeholders.

In terms of political feasibility, the temporary nature of a waiver may render it more appealing. However, much like an amendment, requesting and obtaining a waiver involves a political process.⁷¹ Furthermore, given that the beneficiaries of a waiver for climate policies may primarily be developed countries, concerns about disguised protectionism may also arise.⁷² In the short term, the feasibility of a climate waiver appears low,⁷³ but its temporary nature may make it emerge as a more likely option in the medium to long term.

Option 1C: Adopting an authoritative interpretation of WTO provisions

A third option is to adopt an authoritative interpretation of certain provisions of the WTO Agreements. Through an authoritative interpretation, WTO Members could, for instance, agree that certain measures pursuing climate change objectives or measures implementing a climate change agreement (e.g. the Paris Agreement) are consistent with certain provisions of the WTO Agreements.⁷⁴

Article IX.2 of the Agreement Establishing the WTO confers on the MC and the General Council the exclusive authority to adopt such interpretations.⁷⁵ Recommendation for an authoritative interpretation is to be submitted to the MC by the body overseeing the functioning of the agreement concerned, namely the (a) Council for Trade in Goods for goods-related agreements; (b) Council for Trade in Services for the General Agreement on Trade in Services; and (c) Council for TRIPS for the TRIPS Agreement. The decision is to be adopted by the MC by a three-fourths majority.

There are many provisions in the WTO Agreements that are open to interpretation and this option could help increase legal clarity in such cases. However, unlike an amendment, an authoritative interpretation cannot make new law or impose new obligations. It is only meant to clarify the meaning of existing provisions, and not to modify their content.⁷⁶ This option, therefore, cannot offer the same extent of legal certainty as amendments.⁷⁷ Nonetheless, a decision that removes the legal uncertainty surrounding a particular provision can have effects comparable to those of a clarifying amendment.⁷⁸ Importantly, an authoritative interpretation is immediately binding on all WTO Members and could also be used to modify or reverse

⁷¹ See, for instance, Porges and Brewer, *supra* note 62, at 5–6.

⁷² Interview 3.

⁷³ Interviews 1–11.

⁷⁴ M. Buck & R. Verheyen, *International Trade Law and Climate Change – A Positive Way Forward*, FES-ANALYSE ÖKOLOGISCHE MARKTWIRTSCHAFT, FRIEDRICH-EBERT STIFTUNG (2001), at 33.

⁷⁵ C.D. Ehlermann & L. Ehring, *The Authoritative Interpretation under Article IX. 2 of the Agreement Establishing the World Trade Organization: Current Law, Practice and Possible Improvements*, 8 J. INT'L ECON. L. 803, (2005) at 806.

⁷⁶ Appellate Body Report, *European Communities – Regime for the Importation, Sale and Distribution of Bananas*, WTO Doc. WT/DS27/AB/R (adopted Sept. 25, 1997), para. 383.

⁷⁷ Notably, the Agreement Establishing the WTO clearly states that Article IX.2 ‘shall not be used in a manner that would undermine the amendment provisions in Article X’. see World Trade Organization, *supra* note 28.

⁷⁸ ADVISORY CENTRE ON WTO LAW (ACWL), BACKGROUND PAPER FOR ACWL MEMBERS AND LDCs, GIVING LEGAL EFFECT TO THE RESULTS OF THE DOHA ROUND: AN ANALYSIS OF THE METHODS OF CHANGING WTO LAW (2006) at 26.

interpretations of the Appellate Body,⁷⁹ and could even (potentially) affect outcomes in WTO dispute settlement.⁸⁰

The WTO Members have hardly made any attempt to make use of the authoritative interpretation window.⁸¹ In one occasion, in 1999, the European Communities attempted to obtain an interpretation in order to resolve the so-called ‘sequencing’ issue regarding the relationship between Article 21.5 and 22.2 of the Dispute Settlement Understanding (DSU) on compliance measures.⁸² Another attempt by the EU was the EU Parliament’s resolution urging an authoritative interpretation on the ‘like product’ doctrine.⁸³

Compared to an amendment or a waiver, an authoritative interpretation appears to be a more limited intervention in the regime. It is also simpler and procedurally more straightforward because it concerns the interpretation of existing text, rather than the creation of new text.⁸⁴ Hence, for clarifying certain grey areas in WTO law for climate change purposes, authoritative interpretations may be relatively more feasible, at least compared to an amendment or a waiver, in the medium term. However, like other legal changes, it seems unlikely that it could be adopted in the short term.⁸⁵ The political feasibility will likely depend also on which particular provision of WTO law is in question.

Option 1D: A temporary ‘peace clause’ for trade-related climate measures

Another option to create some legal breathing space for climate action by WTO Members is to agree on a ‘peace clause’ specifying that the Members will not take any legal action through the WTO dispute settlement system on the issue covered by the clause. A peace clause or a ‘moratorium’ could be time-limited and conditional.⁸⁶ It could permit temporary breaches of

⁷⁹ See ACWL, *supra* note 79, at 25. As clarified by the WTO Appellate Body Report, *United States – Measures Affecting the Production and Sale of Clove Cigarettes*, WTO Doc. WT/DS406/AB/R (adopted April 24, 2012), para 262, a decision adopted by Members may qualify as a ‘subsequent agreement between the parties’ regarding the interpretation of a covered WTO agreement or the application of its provisions if: (i) the decision is adopted subsequent to the relevant covered agreement; and (ii) the terms and content of the decision express an agreement between Members on the interpretation or application of a provision of WTO law. Such a subsequent agreement would be taken into account in the interpretation of the WTO Agreements, pursuant to Article 31.3(a) of the 1969 Vienna Convention on the Law of Treaties, which with respect to interpretation of treaty provisions states: ‘There shall be taken into account, together with the context: (a) any subsequent agreement between the parties regarding the interpretation of the treaty or the application of its provisions[.]’

⁸⁰ Porges and Brewer, *supra* note 62, at 1.

⁸¹ WILMERHALE (2005), *Decision Making in the World Trade Organization: Is the Consensus Practice of the World Trade Organization Adequate for Making, Revising and Implementing Rules on International Trade?* September 23, <<https://www.wilmerhale.com/en/insights/publications/decision-making-in-the-world-trade-organization-is-the-consensus-practice-of-the-world-trade-organization-adequate-for-making-revising-and-implementing-rules-on-international-trade-autumn-2005>>

⁸² See General Council, *Request for an Authoritative Interpretation Pursuant to Article IX:2 of the Marrakesh Agreement Establishing the World Trade Organization – Communication from the European Communities*, WTO Doc. WT/GC/W/133 (January 25, 1999), with advice from the International Monetary Fund on balance of payments measures. Also see General Council, *Request for an Authoritative Interpretation Pursuant to Article IX:2 of the Marrakesh Agreement Establishing the World Trade Organization – Communication from the European Communities*, WTO Doc. WT/GC/W/143 (February 5, 1999), with advice from the World Intellectual Property Organization on the Berne Convention.

⁸³ Resolution on Environmental, Health and Consumer Protection Aspects of World Trade, EUR. PARL. DOC. Official Journal C152/78 (1998), <<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A51998IP0125>>

⁸⁴ Interview 6.

⁸⁵ Interviews 1, 3, 4, 5, 6, 7, 8, 9, 10, and 11.

⁸⁶ Kasturi Das & Kaushik Ranjan Bandyopadhyay, *Climate Change and Clean Energy in the 2030 Agenda: What Role for the Trade System?* INTERNATIONAL CENTRE FOR TRADE AND SUSTAINABLE DEVELOPMENT (2016), at vi.

WTO rules by Members, either for some or for all areas of climate change policy.⁸⁷ Given the risks and unpredictability of litigation as a strategy, a moratorium on dispute settlement in the area of clean energy has been suggested.⁸⁸ Such a moratorium could cover some or all areas of climate change mitigation based on an agreement with trading partners, including those whose trade could be impacted by such measures. A more concrete proposal is to require WTO Members to wait at least three years before challenging through WTO dispute settlement national climate measures or countermeasures that restrict trade or otherwise have trade effects.⁸⁹

A temporary peace clause may be adopted through a decision by WTO Members as specified in Article IX.1 of the Agreement establishing the WTO. Such decisions may be agreed upon by the WTO Members in the MCs or at the General Council. Attempt shall first be made to arrive at any such Decision through consensus. In case a decision cannot be reached by consensus, it can be made through a majority vote.

There are some precedents for a peace clause or a moratorium, for instance in the areas of intellectual property rights⁹⁰ and agriculture.⁹¹ Another precedent is the ‘interim peace clause’ agreed through a Ministerial Decision⁹² during the WTO Ministerial Conference held in Bali in 2011.⁹³

Adopting a peace clause through a ministerial decision appears to be relatively more straightforward than the three options discussed above (Options 1A to 1C), but would still require an effort to find consensus among Members.

As for the legal implications, it is unclear whether this option would secure full protection against disputes. To provide legal certainty, a decision on a peace clause or a moratorium would have to clearly state the intention not to challenge certain measures, and clearly describe the measures not to be challenged. However, it remains debatable whether the doctrine of estoppel,⁹⁴ which is well recognised in general international law, could be invoked if a WTO Member challenged a trade-related climate measure of another Member at the WTO dispute settlement system after agreeing to abide by a peace clause.⁹⁵ According to some

⁸⁷ Ricardo Meléndez-Ortiz, *Enabling the Energy Transition and Scale-Up of Clean Energy Technologies: Options for the Global Trade System*, THE E15 INITIATIVE, ICTSD AND WORLD ECONOMIC FORUM (2015), at 7, 17 and 29. See also Porges and Brewer, *supra* note 55, at 7.

⁸⁸ Meléndez-Ortiz, *supra* note 88, at 17.

⁸⁹ Bacchus, *supra* note 12, at 14.

⁹⁰ Article 64.1 of the TRIPS Agreement provided for the theoretical possibility of disputes in respect of ‘non-violation, nullification or impairment’ of rights under the TRIPS Agreement. But Article 64.2 created room for a five-year moratorium on such disputes, with the option of extension (M. Stilwell & E. Tuerk, *Non-Violation Complaints and the TRIPS Agreement: Some Considerations for WTO Members*, CENTER FOR INTERNATIONAL ENVIRONMENTAL LAW (2001), at 2). This moratorium has been extended periodically since, and most recently in 2017 (https://www.wto.org/english/tratop_e/trips_e/nonviolation_background_e.htm).

⁹¹ Under Article 13 of the Agreement on Agriculture, WTO Members agreed to exercise restraint in making use of their rights to countervail or challenge domestic and export subsidies. This peace clause (or ‘due restraint’ provision) expired on 1 January 2004 (ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT (OECD), *AGRICULTURE AND DEVELOPMENT: THE CASE FOR POLICY COHERENCE* (2005), at 55).

⁹² World Trade Organization Ministerial Decision of 7 December 2013, Public Stockholding for Food Security Purposes, WTO Doc. WT/MIN(13)/38–WT/L/913 (December 11, 2013), at 1.

⁹³ The ‘interim peace clause’ allowed developing countries to provide subsidies under public stockholding programmes without being legally challenged in the WTO’s dispute settlement system, provided they met the conditions specified in the Decision and until a permanent solution was reached (<https://www.wto.org/english/thewto_e/minist_e/mc11_e/briefing_notes_e/bfagric_e.htm>).

⁹⁴ The doctrine of estoppel is a principle long recognized in international law, which prevents states from acting inconsistently to the detriment of others (M. L. Wagner, *Jurisdiction by Estoppel in the International Court of Justice*, L. & POL’Y 74 CLR 1777 (1986) at 1777).

⁹⁵ Porges and Brewer, *supra* note 62, at 7–8.

commentators, if a WTO Member were to bring a claim before the WTO dispute settlement system in clear violation of its commitment not to do so under the peace clause, this would be tantamount to a violation of the obligation of ‘good faith’ (enshrined in Article 3.10 of the WTO DSU), and the claim would likely be found inadmissible.⁹⁶ It needs to be underscored that a peace clause is intended to provide temporary breathing space only; it is a mechanism to buy time⁹⁷ until a permanent solution is found to create legal clarity.

Furthermore, it is necessary to define what constitutes a ‘climate measure’ or ‘climate action’ to make sure that a peace clause indeed prevents disputes over them. Thus, a major challenge with a peace clause is to get the scope right. An ill-formulated peace clause could end up offering WTO Members a *carte blanche*, creating a perverse incentive for introducing protectionist or otherwise trade-restrictive climate policy measures.⁹⁸

Given these challenges, and the current political climate surrounding the WTO, adopting a peace clause for climate purposes appears to be very unlikely in the short term.

B. Category 2: Procedural Changes in Institutions and Practices

Given the significant hurdles confronting any legal changes at the WTO in the near term, alternative avenues to enhance the trade system’s contribution to the implementation of the Paris Agreement could focus on procedural changes in trade- as well as climate-related institutions and practices.⁹⁹ This section delves into three such options.

Option 2A: Ensuring technical expertise on climate change in WTO dispute settlement panels

One option is to ensure that the composition of WTO dispute settlement panels reflects the necessary technical expertise to cover climate-related matters.¹⁰⁰ This will not require any legal change, since Article 13 and Appendix 4 of the WTO DSU and several other WTO Agreements already provide the dispute settlement panels with sufficient discretion to seek information and technical advice from experts, provided the relevant rules and procedures are followed.

If a WTO panel wishes to appoint external experts, it can either appoint individual experts, or it can set up a so-called ‘expert review group’ under Article 13.2 of the DSU, for which the procedures enshrined in Appendix 4 of the DSU apply. It is for the panel to decide whether it will appoint experts. A panel may appoint experts at its own initiative, or upon request by a party to a dispute. If a party to a dispute requests the appointment of an expert, the panel, however, is under no legal obligation to accept such a request.

There is no provision as such that clearly states how experts are to be appointed. In the past, experts have been appointed by the parties and the panel together. There have also been instances in which the panel has appointed experts based on a list of names received from the relevant international organisation.¹⁰¹ Given that in the past panels have requested expert advice

⁹⁶ R. Howse (2014), How India & the US Broke the WTO Impasse – Without Either Making Any Concessions, November 15, <<http://worldtradelaw.typepad.com/ielpblog/2014/11/how-india-the-us-broke-the-wto-impasse-without-either-making-any-concessions.html>>

⁹⁷ Droege *et al.*, *supra* note 13, at 37.

⁹⁸ Droege *et al.*, *supra* note 13, at 37.

⁹⁹ Droege *et al.*, *supra* note 13, at 42.

¹⁰⁰ Droege *et al.*, *supra* note 13, at 37.

¹⁰¹ J. Pauwelyn, *The Use of Experts in WTO Dispute Settlement*, 51 INT’L & COMP. L. Q. 325 (2002), at 328, 329, 339, 342.

from other international organisations,¹⁰² a panel could conceivably seek advice from the UNFCCC Secretariat as well.

According to Pauwelyn, even if expert advice is advisory only, it will be difficult for a panel to overrule a consensus position expressed by the experts.¹⁰³ Hence, expert advice could presumably play an important role in climate-related WTO disputes.

In theory, the inclusion of climate change expertise in WTO dispute panels could be accomplished under existing WTO rules. But in practice this could be made more challenging by the ongoing impasse regarding the WTO's Appellate Body: The Trump Administration in the United States is staunchly opposed to the appointment of new Appellate Body judges, arguing that the forum has consistently over-stepped its remit with aggressive interpretations of existing rules.¹⁰⁴ If the impasse continues, the body runs the risk of getting paralysed by December 2019 because it will not have the three judges required to sign off on rulings. However, given that the Appellate Body impasse has not stopped WTO Members from initiating new disputes, or halted the ongoing work of the WTO dispute panels, we believe this option is still worth considering for ongoing¹⁰⁵ and future climate-related disputes. If WTO Members manage to find a way out of the current Appellate Body impasse, this option will arguably become more feasible. Moreover, given that the complexities of climate-related WTO disputes will likely increase in the future, WTO Members may realise more and more the need to include climate expertise in dispute panels.¹⁰⁶ Overall, this option seems to have a reasonably high potential¹⁰⁷ in the short term.

Option 2B: Including mandatory climate-related impact assessments in the WTO's Trade Policy Review Mechanism

Another WTO window worth exploring is the Trade Policy Review Mechanism (TPRM), the WTO's central surveillance system of national trade policies.¹⁰⁸ There have been repeated calls for the TPRM to be opened up to environmental (and social) interests. It has been suggested, for instance, that the Trade Policy Reviews (TPRs) might survey not only the impact of national environmental requirements on free trade, but also the impact of international trade agreements on national ecological interests and policies.¹⁰⁹ Similar arguments may hold for climate change.

¹⁰² See, e.g., Panel and Appellate Body Reports, *India – Quantitative Restrictions on Imports of Agricultural, Textile, and Industrial Products*, WTO Doc. WT/DS90 (adopted Sept. 22, 1999). Also see Complaint by the European Communities, *United States – Section 110(5) of the US Copyright Act*, WTO Doc. WT/DS160 (panel report adopted July 27, 2000).

¹⁰³ Pauwelyn, *supra* note 102, at 355.

¹⁰⁴ T. Payosova, G.C. Hufbauer and J. J. Schott, *The Dispute Settlement Crisis in the World Trade Organization: Causes and Cures*, PETERSON INSTITUTE FOR INTERNATIONAL ECONOMICS (2018).

¹⁰⁵ An ongoing dispute that has become highly contentious and reached the stage of formation of a new compliance panel is *India – Certain Measures Relating to Solar Cells and Solar Modules (India – Solar Cells)* (DS456) (for details, see https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds456_e.htm) brought about by the United States. A sort of a tit-for-tat dispute that India initiated and that has now reached the panel stage is *United States – Certain Measures Relating to the Renewable Energy Sector (US – Renewable Energy)* (DS510) (for details, see https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds510_e.htm).

¹⁰⁶ Interview 6. Given that WTO disputes, in general, are becoming increasingly complex and the number of disputes requiring high levels of technical expertise is also increasing in tandem, more effective use of the external experts in WTO panels, in general, is also being suggested. See <<http://www.meti.go.jp/english/report/data/g400117e.html>>.

¹⁰⁷ Interviews 1, 5, 6.

¹⁰⁸ For further details, see <https://www.wto.org/english/tratop_e/tp_r_e/tp_r_e.htm>.

¹⁰⁹ T. Santarius, H. Dalkmann, M. Steigenberger, & K. Vogelpohl, *Balancing Trade and Environment: An Ecological Reform of the WTO as a Challenge in Sustainable Global Governance*, WUPPERTAL INSTITUTE FOR CLIMATE, ENVIRONMENT, ENERGY (2004), at 45.

Interestingly, according to the annual Environmental Database (EDB) published by the WTO Committee on Trade and Environment (CTE),¹¹⁰ there are many instances in which TPRs have covered environment-related and, more specifically, climate policy-related information. For example, the EDB published in October 2017 shows that among the 20 countries whose TPRs were carried out in 2015, 19 had included environment-related information.

However, any inclusion of climate-related information still only occurs on an individual and voluntary basis. Also, at present these are mostly at the level of providing information, somewhat complementing the notification provisions of the WTO.¹¹¹ Indeed, the TPRM has historically tended to be a dormant peer-review assessment mechanism, largely used only for information purposes. Bacchus, however, proposes to strengthen the TPRM to include a ‘required’ impact assessment of relevant domestic measures on climate change, and also on efforts to address climate change.¹¹²

While enhanced transparency may help build trust among WTO Members, the TPRM cannot serve as a basis for enforcement, dispute settlement, or as a means to seek new commitments from Members.¹¹³ However, using the TPRM as a first level (baseline) of information in the context of dispute settlement (especially for climate change measures, which can be complex and vastly different across countries) could be explored.¹¹⁴ The TPRM could also help in providing a standardised approach for measuring different climate change responses across countries.¹¹⁵ This could conceivably enhance comparability of climate measures undertaken by WTO Members. If the TPRM leads to information on whether or not a country’s actions are in line with the Paris Agreement, that may potentially lead to fewer challenges and reduce the burden on the already overcharged WTO dispute settlement system.¹¹⁶

However, at present there is no legal basis for any explicit mandatory inclusion of climate change aspects in the TPRM. Any provision mandating it will require an amendment of Annex 3 on the TPRM, subject to approval by the Ministerial Conference.¹¹⁷ This brings us back to the difficulties of implementing WTO amendments discussed under Option 1A.

While a mandatory inclusion of climate-related impact assessment in the TPRs thus appears to be unlikely in the short term,¹¹⁸ voluntary inclusion of such information is possible and already happening, as evinced by the aforementioned EDB statistics as well as the case of fossil fuel subsidies¹¹⁹ (see Option 5B later). Broadly, the WTO membership appears to be increasingly open to environmental or climate-related queries and revelations, albeit on a voluntarily basis. The openness of WTO membership may increase even further over time as

¹¹⁰ The annual Environmental Database (EDB) published by the WTO Committee on Trade and Environment (CTE) collates all environment-related information included in TPRs undertaken in a particular year (Committee on Trade and Environment, Environmental Database for 2015, Note by the Secretariat, WTO Doc. WT/CTE/EDB/15 (October 12, 2017). The EDB covers information on environment-related policies, measures or programmes contained in the two TPR reports – one prepared by the member country’s government, and the other prepared by the WTO Secretariat.

¹¹¹ Between 1997 and 2015, 498 environment-related notifications were submitted by WTO Members. See Committee on Trade and Environment, *supra* note 114, at 30.

¹¹² Bacchus, *supra* note 12, at 6.

¹¹³ P. Low, *Hard Law and ‘Soft Law’: Options for Fostering International Cooperation*, THE E15 INITIATIVE, ICTSD AND WORLD ECONOMIC FORUM (2015), at 4.

¹¹⁴ Interview 8.

¹¹⁵ Interview 8.

¹¹⁶ Interview 8.

¹¹⁷ Interview 4.

¹¹⁸ Interviews 1, 2, 4, 5, 6.

¹¹⁹ Interview 2.

trade issues become increasingly intertwined with climate change issues (as well as the Sustainable Development Goals (SDGs)).¹²⁰

Option 2C: Enhancing coordination between the WTO and UNFCCC through more intensive use of existing forums

Another option of procedural reforms could be to enhance coordinated efforts, in a systematic way, between the WTO and the UNFCCC for the implementation of the Paris Agreement. This could be achieved through more effective use of the existing forums, such as the WTO Committee on Trade and Environment (CTE)¹²¹ and the UNFCCC's 'Improved Forum on the Impact of the Implementation of the Response Measures'.¹²² This could strengthen the knowledge base of both institutions and improve the mutual understanding of trade and climate regimes, especially as regards the respective objectives, principles and legal obligations.¹²³

Notably, some cooperation is already taking place between the WTO and the UNFCCC. For instance, the UNFCCC representatives participate in meetings of the regular WTO CTE and as *ad-hoc* observer to the CTE in Special Session.¹²⁴ On the other hand, the WTO secretariat representatives attend UNFCCC Conference of Parties (COP) meetings.¹²⁵ However, there still is much scope to increase engagement. With that aim in view the existing scope available to each forum could be used more intensively, and/or the respective mandates could be broadened to create greater room for discussion of the trade impacts of climate policies or the climate impacts of trade policies.

There have been instances where issues first raised in the CTE eventually evolved into fully-fledged negotiations, such as fisheries subsidies.¹²⁶ However, climate change is not explicitly part of the WTO's work programme under the CTE (or elsewhere). The CTE has a wider mandate on the environment.¹²⁷ The Work Programme of the CTE under the Doha Round and beyond, however, already includes issues such as the relationship between WTO rules and trade measures contained in multilateral environmental agreements and between their dispute settlement mechanisms, among others. Within this remit, several issues relating to climate change have been discussed in the CTE in the past.¹²⁸

As for institutional dialogue, the UNFCCC Secretariat already has an observer status within the CTE. The UNFCCC is often also invited in the Special Sessions of the CTE on an ad-hoc basis. However, there still is much scope to increase engagement with the UNFCCC Secretariat and, more generally, debating trade-related climate policies.

¹²⁰ Interviews 2 and 4.

¹²¹ See <https://www.wto.org/english/tratop_e/envir_e/wrk_committee_e.htm>.

¹²² Bacchus, *supra* note 12, at 6.

¹²³ Droege *et al.*, *supra* note 13, at 43.

¹²⁴ The negotiations on trade and the environment are part of the Doha Development Agenda launched at the Fourth WTO Ministerial Conference in Doha, Qatar, in November 2001 with the overarching objective of enhancing the mutual supportiveness of trade and environmental policies. These discussions take place in "Special Sessions" of the CTE. (see <https://www.wto.org/english/tratop_e/envir_e/envir_negotiations_e.htm>).

¹²⁵ L. Debornes, *Synergising Trade and Climate Talks: How Can the WTO and UNFCCC Learn From Each Other?* CUTS INTERNATIONAL, GENEVA (2018), at 7.

¹²⁶ See <https://www.wto.org/english/tratop_e/envir_e/envt_intro_e.htm>.

¹²⁷ See <https://www.wto.org/english/tratop_e/envir_e/issu5_e.htm>.

¹²⁸ These include issues such as, the environmental benefits of removing trade restrictions in the energy and forestry sectors and the effect of energy efficiency labelling on market access, <https://www.wto.org/english/tratop_e/envir_e/climate_challenge_e.htm>

As for the UNFCCC, the ‘improved forum on the impact of the implementation of response measures’¹²⁹ is the primary institutional space for ongoing discussions on trade-related matters.¹³⁰ Although the work programme of the forum does not directly tackle the climate-trade overlap, technical work on assessing the impacts of response measures suggests that trade-related impacts will be considered. In particular, the UNFCCC guidance on the impact assessment of response measures in developing countries mentions trade impacts from tariffs and BCAs.¹³¹ The submissions to the UNFCCC Secretariat by the G77 and China¹³² group have also covered trade aspects, including impacts of unilateral trade measures (which could include BCAs).¹³³ Under the improved forum, technical work on measuring and identifying the trade impacts of climate policy measures has now begun,¹³⁴ but the modalities for its work programme are still under negotiation.¹³⁵

Although some trade-relevant discussions over the years have taken place in the context of response measures, a systematic approach is still missing.¹³⁶ There is for instance no systematic discussion of the trade impacts of parties’ NDCs.¹³⁷ Moreover, while WTO representatives have participated in the UNFCCC meetings, there is no clear coordination with the work carried out by WTO bodies.¹³⁸ Against this background, the forum could go a long way in coordinating work with the WTO.¹³⁹

¹²⁹ Recognising the importance of avoiding or minimising negative impacts of response measures, at the 16th Conference of the Parties (COP) in 2010 in Cancun, the UNFCCC Parties decided to create a forum on the impact of the implementation of response measures. Subsequently, at COP17 in 2011 in Durban, the Parties adopted a related work programme under the two subsidiary bodies, the Subsidiary Body for Scientific and Technological Advice and the Subsidiary Body for Implementation. The Parties also established a ‘forum’ on the impact of the implementation of response measures, to be convened by the Chairs of the subsidiary bodies, to implement the work programme. At COP21 in 2015 in Paris, Parties decided to continue and ‘improve’ the forum, and adopted the work programme on the impact of the implementation of response measures. U. N. Framework Convention on Climate Change, Report of the Conference of the Parties on its sixteenth session, held in Cancun from 29 November to 10 December 2010, Addendum, Part Two: Action taken by the Conference of the Parties at its sixteenth session, The Cancun Agreements: Outcome of the work of the Ad Hoc Working Group on Long-term Cooperative Action under the Convention, U. N. Doc. FCCC/CP/2010/7/Add.1 -Decision 1/CP.16 (March 15, 2011) <<https://unfccc.int/resource/docs/2010/cop16/eng/07a01.pdf>>, paras. 88–94. For a chronological account of the forum, see <<https://unfccc.int/index.php/topics/mitigation/workstreams/response-measures/chronology#main-content>>.

¹³⁰ Droege *et al.*, *supra* note 13, at 8.

¹³¹ U.N. Framework Convention on Climate Change, *Guidance to Assist Developing Country Parties to Assess the Impact of the Implementation of Response Measures, including Guidance on Modelling Tools*, U.N. Doc. FCCC/TP/2016/4 (April 28, 2016) at 8.

¹³² A recent submission in May 2018 has been cited by U. N. Framework Convention on Climate Change, *Revised Draft Elements of the Modalities, Work Programme and Functions of the Forum on the Impact of the Implementation of Response Measures under the Paris Agreement, SBSTA 48 agenda item 9b; SBI 48 agenda item 17b. Informal document by the Chairs* (Version of May 6, 2018) at 6.

¹³³ The G77 and China proposals call for conducting qualitative assessments and analysis of adverse impacts of response measures, including unilateral ones, in terms of their consequences for trade, among others. They also suggest developing methodologies and modelling tools (computable general equilibrium or hybrid) for assessing adverse impacts of response measures, including unilateral measures in terms of their trade consequences.

¹³⁴ See <<https://unfccc.int/process-and-meetings/conferences/bonn-climate-change-conference-april-2018/events-and-schedules/mandated-events/mandated-events-during-sb-48/in-forum-training-workshop-on-economic-modelling-part-1>>.

¹³⁵ For an update see U. N. Framework Convention on Climate Change, *supra* note 135.

¹³⁶ Bacchus, *supra* note 12, at 21.

¹³⁷ See <https://unfccc.int/files/parties_observers/submissions_from_observers/application/pdf/965.pdf>

¹³⁸ Recent training workshops organised by the forum included experts from both developing and developed countries, as well as from intergovernmental and international organisations.

¹³⁹ Possible elements identified in the technical papers and the workshops pertaining to the ‘improved forum’ have also underscored enhanced collaboration with international organisations. See, e.g.,

While coordinated actions by the WTO and the UNFCCC will not provide legal certainty, they could nonetheless help apply or interpret laws, and promote integration of climate concerns in trade matters, which may indirectly contribute to reducing legal uncertainty. Such efforts could also help scale down tension and foster more cooperative approaches while formulating climate policies in tandem with trade law. The forums could thus be used as a starting point for discussions of controversial issues at the trade-climate intersection. Once the ice is broken, this could eventually lead to more formal negotiations on reforms, including possible legal reforms.

Coordination through more effective use of existing forums is a pragmatic approach. However, to date, not much has happened on this front. For instance, over the past two decades, the status of the CTE has not changed much in the way it approaches climate change.¹⁴⁰ Nonetheless, changes may be possible. Costa Rica, for instance, is in the process of forming a new group of WTO Members at the CTE on sustainable trade.¹⁴¹ Trade-related matters are also being discussed at the UNFCCC's improved forum on implementation of response measures, with some UNFCCC Parties asking for more focused talks. Overall, therefore, this option seems to have a reasonably high potential¹⁴² in the short term.

C. Category 3: Actions under Plurilateral and Regional Trade Agreements

As multilateral initiatives and decisions to create room for climate change policies and measures have their own difficulties and challenges, particularly owing to the large number of WTO Members (164 at present), advancing climate change objectives among a smaller group of like-minded countries is an avenue worth exploring – either through plurilateral initiatives or through regional trade agreements (RTAs).

Plurilateral agreements can be created under the auspices of the WTO or outside of it. A plurilateral agreement under the WTO could be either: (a) 'exclusive', i.e. a stand-alone deal (e.g. the Government Procurement Agreement); or (b) 'inclusive', whereby benefits/concessions would be extended to all WTO Members on a most-favoured-nation (MFN) basis (e.g. Information Technology Agreement; and the Environmental Goods Agreement under negotiation).

An 'exclusive' plurilateral agreement under the WTO would offer the Members more flexibility as to what to cover within it, but would require consensus by all WTO members, making it politically challenging. In an 'exclusive' agreement, only members would benefit from trade liberalisation under the deal. For an 'inclusive' plurilateral agreement under the WTO, a 'critical mass' of Members is generally regarded as preferable to ensure that the Members reap sufficient benefits.¹⁴³

Examples of 'inclusive' deals are the Information Technology Agreement, and the Environmental Goods Agreement. Such agreements can complement multilateral initiatives under the WTO and may potentially lead to multilateral rulemaking in future.

<https://unfccc.int/files/cooperation_support/response_measures/application/pdf/update_on_the_improved_forum_secretariat.pdf>.

¹⁴⁰ Interview 2.

¹⁴¹ Interview 2.

¹⁴² Interviews 2, 3, 4, 6.

¹⁴³ van Asselt, *supra* note 11, at 20.

As for RTAs, several analysts have argued that they can potentially contribute to climate governance.¹⁴⁴ Given that RTA negotiations involve only a handful of countries addressing a multitude of different issues, they allow for bargaining and the conclusion of new agreements. RTAs also offer opportunities for policy experimentation through which states can craft and test climate provisions at a limited scale with like-minded countries. Besides, RTAs are uniquely positioned to address various measures at the intersection of trade and climate change, such as the transfer of low-carbon technologies, emissions trading, BCAs and fossil fuel subsidies, to name a few.¹⁴⁵ RTAs can further help in setting common rules for trade-related climate measures by aligning standards and regulations.¹⁴⁶ Finally, climate measures agreed at the regional level may potentially be multilateralised¹⁴⁷ at a later stage.

This section considers three policy options in the plurilateral and regional arena: (i) intensifying efforts under plurilateral approaches, particularly focusing on the Environmental Goods Agreement (EGA); (ii) including climate-related provisions in prospective RTAs; and (iii) reviewing and renegotiating existing RTAs with a view to include climate change considerations.

Option 3A: Intensifying efforts under plurilateral approaches, particularly the Environmental Goods Agreement

Climate-friendly provisions could be included in new plurilateral trade agreements. Plurilaterals struck under the aegis of the WTO, particularly the ‘inclusive’ type of agreements, could offer scope for a group of like-minded WTO Members to move ahead and agree on common rules addressing certain areas at the intersection of trade and climate change. This would bypass the hurdles caused by the slow pace of decision-making under the WTO.

Hufbauer and colleagues have proposed a plurilateral trade and climate code which would deal with a range of aspects at the intersection of climate and trade.¹⁴⁸ The International Centre for Trade and Sustainable Development has suggested a ‘Sustainable Energy Trade Agreement’ covering the liberalisation of climate-friendly goods and services.¹⁴⁹

A plurilateral initiative that has significant potential and has also made some concrete progress is the Environmental Goods Agreement, which is being negotiated under the aegis of the WTO as an ‘inclusive’ deal. Although the WTO Doha Round mandate includes the liberalisation of trade in environmental goods and services, multilateral negotiations have long since stalled. The plurilateral EGA therefore offers an alternative route to advance the goals of

¹⁴⁴ See, e.g. M.W. Gehring, M.C. Cordonier Segger, F. de Andrade Correa, P. Reynaud, A. Harrington & R. Mella, *Climate Change and Sustainable Energy Measures in Regional Trade Agreements (RTAs): An Overview*, INTERNATIONAL CENTRE FOR TRADE AND SUSTAINABLE DEVELOPMENT (2013). See also, van Asselt, *supra* note 4.

¹⁴⁵ See J. F. Morin & S. Jinnah, *The Untapped Potential of Preferential Trade Agreements for Climate Governance*, 27 ENVIRON. POLIT. 541 (2018) (containing a review of 688 RTAs signed between 1947 and 2016).

¹⁴⁶ Droege et al., *supra* note 13, at 38.

¹⁴⁷ See Richard Baldwin, *Multilateralising 21st Century Regionalism*, ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT (2014) (on multilateralising regionalism). For multilateralising climate measures under RTAs, see K. Holzer & T. Cottier, *Addressing Climate Change under Preferential Trade Agreements: Towards Alignment of Carbon Standards under the Transatlantic Trade and Investment Partnership*, 35 ENV. CHANGE 514 (2015).

¹⁴⁸ G. C. Hufbauer, S. Charnovitz & J. Kim, *supra* note 7.

¹⁴⁹ INTERNATIONAL CENTRE FOR TRADE AND SUSTAINABLE DEVELOPMENT (ICTSD), *FOSTERING LOW CARBON GROWTH: THE CASE FOR A SUSTAINABLE ENERGY TRADE AGREEMENT* (2011).

the Paris Agreement,¹⁵⁰ as it can potentially help disseminate climate-related products and technologies by lowering tariffs on environmental goods. Given its ‘inclusive’ nature, once a ‘critical mass’ is reached, all WTO members could eventually benefit from improved access to the markets of the EGA participants,¹⁵¹

In 2012, the 21 members of the Asia-Pacific Economic Cooperation (APEC) committed to reducing their applied tariffs to five per cent or less on a list of environmental goods¹⁵² by the end of 2015.¹⁵³ Shortly thereafter, in 2014, 14 WTO Members launched negotiations on a plurilateral EGA, with three more members subsequently joining forces. This is being negotiated in line with WTO rules. The EGA builds on the APEC list of environmental goods. The latest list, released in August 2016 as part of the EGA negotiations, comprises goods from around 300 tariff lines, including several in the field of clean energy technology. The EGA and its benefits could eventually be extended on an MFN basis to all WTO Members, subject to the condition that WTO Members in the EGA represent a ‘critical mass’¹⁵⁴ of global trade in environmental goods. However, efforts to reach a deal on the EGA came to a halt in December 2016, when participants including the EU, the United States and China failed to reach a landing zone.¹⁵⁵

An inherent challenge of the EGA process is the lack of agreement on the definition of environmental goods.¹⁵⁶ Many so-called ‘environmental’ goods have ‘dual’ or multiple uses,¹⁵⁷ raising questions on how appropriate it is to call them such. Another question is how to define the ‘environmentally preferable’ products.¹⁵⁸ All this has led to lengthy and heated debates as to which goods should be listed for the EGA, as negotiations are following a list-based approach.

Several suggestions have been made on extending the scope of the EGA. It has been recommended, for instance, that the list of goods under negotiation could cover goods and technologies for climate change adaptation, going beyond the current scope, which focuses on mitigation.¹⁵⁹ Given its list-based approach, the EGA could have an in-built mechanism allowing to add new items and delete existing items. This would create room for updating the EGA’s list of goods in line with technological progress and the progressive commercialisation

¹⁵⁰ M. Araya, *The Relevance of the Environmental Goods Agreement in Advancing the Paris Agreement Goals and SDGs: A Focus on Clean Energy and Costa Rica’s Experience*, INTERNATIONAL CENTRE FOR TRADE AND SUSTAINABLE DEVELOPMENT (2016).

¹⁵¹ A.H. Lim, *WTO Work on Trade in Environmental Goods and Services, Presentation in the Training Course on ‘Environmental Goods and Services Negotiations’, at United Nations Conference Centre, Bangkok, Thailand* (2017), <<http://www.unescap.org/sites/default/files/1-2.EGS-Trade2-WTO%20work.pdf>>.

¹⁵² ASIA-PACIFIC ECONOMIC COOPERATION (APEC), ANNEX C – APEC List of Environmental Goods, September 8 (2012), <https://www.apec.org/Meeting-Papers/Leaders-Declarations/2012/2012_aelm/2012_aelm_annexC.aspx>.

¹⁵³ ASIA-PACIFIC ECONOMIC COOPERATION (APEC) (2012), 2012 Leaders’ Declaration, September 8, <https://apec.org/Meeting-Papers/Leaders-Declarations/2012/2012_aelm.aspx>.

¹⁵⁴ The point at which membership of the EGA reaches critical mass could be defined in various ways, including by share of trade in environmental goods (Das & Bandyopadhyay, *supra* note 87, at 11).

¹⁵⁵ *Ministerial Talks to Clinch Environmental Goods Agreement Hit Stumbling Block*, 20/42 BRIDGES, December 8, 2016, <<https://www.ictsd.org/bridges-news/bridges/news/ministerial-talks-to-clinch-environmental-goods-agreement-hit-stumbling>>.

¹⁵⁶ A.H. Lim, *supra* note 155.

¹⁵⁷ Interview 7.

¹⁵⁸ The question here is whether products could be considered ‘environmentally preferable’ based on the lifecycle of their production. However, in practice, environmentally preferable products are defined based on their superior environmental performance during end use (*Trade in Environmental Goods: A Perspective* (Export-Import Bank of India, Working Paper No.69, 2017 at 16).

¹⁵⁹ Das & Bandyopadhyay, *supra* note 87, at 10.

of more climate-friendly goods.¹⁶⁰ A major reason why the EGA in its present form is limited in scope is that it was not conceived as a contribution to climate action¹⁶¹

Reviving the EGA talks can help deliver on both the Paris Agreement and trade liberalisation in times of increasing trade barriers. It seems likely that, for the time being, the EGA negotiations remain stalled,¹⁶² as in some key capitals the agreement does not seem to be a priority.¹⁶³ Arguably, it may be possible to resume the negotiations following the 12th WTO Ministerial Conference in 2019.¹⁶⁴ In short, while EGA negotiations may be revived in the short to medium term, it remains to be seen whether the barriers mentioned above can be addressed.

Option 3B: Including climate-friendly provisions in RTAs under negotiation and in future RTAs

Environmental provisions in RTAs have become increasingly far-reaching. Early RTAs were merely replicating the WTO's environmental provisions. By now, however, there are multiple ways in which environment- or more specifically climate-related provisions are included in RTAs.¹⁶⁵ Climate change-related provisions could be included in RTAs either as part of the main text or as a side-agreement.

The North American Free Trade Agreement (NAFTA) was the first RTA to be accompanied by a side-agreement on the environment (not specifically on climate change). Subsequent RTAs have followed suit, either with side-agreements or with chapters and provisions relating to the environment and sustainability that are integrated into the text of the agreement itself.

While in some agreements they take the form of general statements of intent, many RTAs go further and include specific commitments to operationalise such statements. The concrete provisions could be expressed in various forms, such as:

- waivers or windows to avoid conflicts with climate change provisions (and other provisions related to sustainable development);
- deeper cooperation arrangements specified in side-agreements and other chapters of RTAs; or
- enhanced trade and investment in specific sectors of relevance to climate change, such as environmental goods and services, renewable energy, carbon markets, organic agriculture, sustainable transport, sustainably harvested forests, etc.¹⁶⁶

Based on an extensive review, Morin and Jinnah¹⁶⁷ argue that, despite their variety, climate-related provisions in RTAs continue to remain weak because, (a) they are poorly designed from a legal perspective; (b) they have failed to diffuse across RTAs, especially compared with other environmental issues; and (c) they have not been taken up by large greenhouse gas emitters.

The EU has played a significant role on this front. The bloc started including environmental provisions in its RTAs with third countries in the mid-1990s.¹⁶⁸ Recent RTAs negotiated by the EU systematically include provisions on sustainable development. Their aim

¹⁶⁰ A. Cosbey, *The Green Goods Agreement: Neither Green nor Good?* IISD COMMENTARY, INTERNATIONAL INSTITUTE FOR SUSTAINABLE DEVELOPMENT (2014), at 2.

¹⁶¹ Interview 2.

¹⁶² Interviews 2 and 3.

¹⁶³ Interview 2.

¹⁶⁴ Interview 2.

¹⁶⁵ M.W. Gehring, *et al.*, *supra* note 148. Also see J.F. Morin & S. Jinnah, *supra* note 138.

¹⁶⁶ M.W. Gehring, *et al.*, *supra* note 148, at 10–11.

¹⁶⁷ J. F. Morin & S. Jinnah, *supra* note 149.

¹⁶⁸ Droege *et al.*, *supra* note 13, at 12.

is to maximise the leverage of increased trade and investment to fight against climate change, among other issues.¹⁶⁹ The sustainable development chapters of the EU free trade agreements (FTAs) have, in broad terms, worked well.¹⁷⁰ Whereas all sustainable development chapters in recent EU FTAs include provisions on trade and climate change, those negotiated in the era of Paris Agreement (including the FTAs with Singapore, Vietnam, and Japan) would contain stronger and more detailed provisions in this area. These will (a) reaffirm a shared commitment to the effective implementation of the Paris Agreement, (b) commit the parties to close cooperation in the fight against climate change, and (c) commit the parties to agree on and carry out joint actions.¹⁷¹ In another significant move, in early 2018 the EU took the decision to refuse to sign trade deals with countries that do not ratify the Paris Agreement.¹⁷²

Another notable example is CETA - the Canada-European Union Comprehensive Economic and Trade Agreement which carves out a number of important provisions to support climate action. For instance, all tariffs on all goods – including a growing cluster of low-carbon products and related specialised services – are now or soon will be at zero. CETA also sets out new provisions to enable the exchange of professionals; and opens new and substantial opportunities in public procurement.¹⁷³

Extending such practices, there are various ways to include climate-friendly provisions in RTAs undergoing negotiation, as well as in future RTAs.

RTAs can play an important role at a time of lower interest in WTO rule-making. Regionalism could also be a good avenue to promote regulatory cooperation and harmonisation across major economies without going through the slower multilateral process. For example, even though negotiations were halted in 2016, the Transatlantic Trade and Investment Partnership could have led to the harmonisation of carbon trading and biofuel policies across Europe and North America.¹⁷⁴

However, the political feasibility of including climate-friendly provisions in prospective RTAs may vary from one country or region to another,¹⁷⁵ particularly if the provisions are formulated in binding terms. If the climate-related provisions in RTAs are non-binding, the political feasibility may increase.¹⁷⁶ Overall, therefore, this option seems to have medium potential in the short term.

Option 3C: Reviewing and renegotiating existing RTAs in light of their contribution to the implementation of the Paris Agreement and NDCs

This option could potentially be relevant for all countries that have entered into RTAs and are working on implementing the Paris Agreement. For instance, following the pioneering initiatives taken by the EU in advancing the climate change objectives of the Paris Agreement through RTAs (as discussed above), the bloc could intensify its review processes of existing

¹⁶⁹ European Commission, *Feedback and Way Forward on Improving the Implementation and Enforcement of Trade and Sustainable Development Chapters in EU Free Trade Agreements* (February 26, 2018), at 1 <http://trade.ec.europa.eu/doclib/docs/2018/february/tradoc_156618.pdf>.

¹⁷⁰ *Report on Implementation of Free Trade Agreements 1 January 2016 - 31 December 2016*, COM (2017) 654 final (November 9, 2017).

¹⁷¹ European Commission, *supra* note 173, at 10.

¹⁷² J. Stone, *EU to Refuse to Sign Trade Deals with Countries that Don't Ratify Paris Climate Change Accord*, THE INDEPENDENT, February 12, 2018.

¹⁷³ See <<https://borderlex.eu/commentary-trade-can-be-a-driver-of-climate-action/>>

¹⁷⁴ Interview 3. See also Holzer & Cottier, *supra* note 151.

¹⁷⁵ Interviews 6, 7, 8 and 9. For instance, for the United States political feasibility could be medium only at least in the short term (Interview 9).

¹⁷⁶ Interviews 5.

RTAs.¹⁷⁷ Any such initiative could check the extent to which existing RTAs can support the implementation of the Paris Agreement and related NDCs. This could be followed by cooperation – or possible renegotiation – with the trade partners to correct possible disincentives or hurdles. Such review processes could also become part of regular reviews and/or wider reviews of RTAs. The recent renewal of the EU-Mexico Free Trade Agreement, which aimed at updating the deal signed in 2000, is a case in point. In this case, both parties committed to effectively implementing their obligations under the Paris Agreement.¹⁷⁸ However, as shown by the ongoing renegotiation of the NAFTA,¹⁷⁹ there are concerns that re-opening an RTA could also sometimes risk weakening existing provisions on environment and climate change, depending on the agenda of the parties to the RTA.

While a review, or even a renegotiation, of the existing RTAs for climate change purposes may be a plausible proposition for countries or regions that are seeking to take a lead on climate action (e.g. the EU), this may not hold true for all countries. Given that renegotiating RTAs, in general, may be a politically difficult proposition¹⁸⁰ for some countries, their renegotiation for climate purposes may also not be a highly plausible option.¹⁸¹ In addition, this depends to a large extent on the relative position of power of the negotiating party championing climate issues and concerns. Another practical risk is that the renegotiation of RTAs for climate purposes could trigger a broader review of the agreement, well beyond climate-related aspects. This possibility may render countries reluctant to open up an RTA for review.

However, some RTAs may embed periodical review provisions or termination dates, which provide an explicit reason to review and renegotiate them after a specified time period. In case an RTA is undergoing such a review, it may be possible to reconsider its climate dimensions and take corrective actions accordingly. Overall, this option appears to be unlikely at least in the short term. Including climate-friendly provisions in new RTAs (Option 3B) is arguably easier to accomplish politically than reviewing and renegotiating existing RTAs.¹⁸²

D. Category 4: Border Carbon Adjustments

Border carbon adjustments are trade-related policy instruments to offset differences in the stringency of climate policies between trade partners. They do so by imposing a tax or other regulatory measure on imports based on their carbon content and/or by exempting exports from domestic carbon constraints.

BCAs have been periodically discussed as a way to address concerns about emissions leakage (when climate action in one region merely shifts the incidence of emissions elsewhere) and to incentivise climate-laggard nations to adopt more ambitious climate policies.¹⁸³

¹⁷⁷ Susanne Droege, Harro van Asselt, Kasturi Das & Michael Mehling, *Mobilising Trade Policy for Climate Action under the Paris Agreement: Options for the European Union*, SWP RESEARCH PAPER, 2018/01, GERMAN INSTITUTE FOR INTERNATIONAL AND SECURITY AFFAIRS (2018), at 6.

¹⁷⁸ *EU, Mexico Conclude New Trade Agreement Negotiations*, FINANCIAL EXPRESS, April 22, 2018, <<https://www.financialexpress.com/world-news/eu-mexico-conclude-new-trade-agreement-negotiations/1141243>>.

¹⁷⁹ SIERRA CLUB, THE COUNCIL OF CANADIANS, AND GREENPEACE MEXICO (2018), *NAFTA 2.0: For People or Polluters? A Climate Denier's Trade Deal versus a Clean Energy Economy*, <<https://canadians.org/sites/default/files/publications/report-nafta-people-or-polluters.pdf>>.

¹⁸⁰ Interviews 4, 6, and 7.

¹⁸¹ Interviews 4, 6, 7 and 9. The US is an example (Interview 9).

¹⁸² Interviews 1 and 3.

¹⁸³ For more detail, see Michael Mehling, Harro van Asselt, Susanne Droege, Kasturi Das & Cleo Verkuijl, *Designing Border Carbon Adjustments for Enhanced Climate Action*, CLIMATE STRATEGIES (2017). Also see

However, BCAs are often regarded as being at risk of violating the WTO law. First, it is not clear whether a domestic tax based on the carbon content of a product could be eligible for adjustment at the border.¹⁸⁴ Moreover, even if a domestic carbon tax is determined to be adjustable at the border, it has to be ensured in addition that the concomitant border tax adjustment abides by the national treatment⁵ requirements, which is another pillar of the non-discrimination principle of the WTO, besides the MFN (which also has to be complied with). Another big question that comes up in this context pertains to that of “like” products: whether under the WTO jurisprudence products can be regarded as “non-like” only on the basis of their differing carbon content. There is a significant uncertainty in the existing WTO jurisprudence on this question as well, which adds further to the ambiguities pertaining to the WTO legality of any border carbon adjustment (BCA) measure.¹⁸⁵

Several concrete changes to the trade regime have been suggested to facilitate the deployment of BCAs without violating trade rules. In this section we consider six options.

Although each of these options would contribute to greater legal certainty and coherence across regimes, the required political endorsement will likely be difficult to secure.¹⁸⁶ Given the political sensitivity of BCAs, even informal avenues of cooperation, for instance to promote dialogue about their use, have faced resistance in the past. This was the case when Singapore attempted, and ultimately failed, to launch a discussion of BCAs in the WTO CTE.¹⁸⁷

Tactically, some of these options (the amendment to WTO law, the waiver, the authoritative interpretation and the peace clause) also harbour the risk of limiting future flexibility and making it more difficult to justify BCAs or other climate measures. A majority among legal scholars holds that appropriately designed BCAs aimed at preventing leakage can already pass muster under current WTO law.¹⁸⁸ But any attempts to adopt these options might signal that BCAs are illegal without further steps, such as a waiver. Also, like other climate policy options, BCAs can take different shapes: any legal steps to allow a narrowly defined BCA could thus exclude variations on that specific design. Rather than helping promote climate

Michael Mehling, Harro van Asselt, Kasturi Das & Susanne Droege, *Beat protectionism and emissions at a stroke*, 559 NATURE (2018).

¹⁸⁴ The GATT allows the WTO member countries to apply border tax adjustment for certain categories of domestic taxes and charges, provided certain requirements are met. As far as border tax adjustment on imports is concerned, the relevant provisions are included in Articles II and III of the GATT. Article II.2(a) of the GATT:

Nothing in this Article shall prevent any contracting party from imposing at any time on the importation of any product: a charge equivalent to an internal tax imposed consistently with the provisions of paragraph 2 of Article III (footnote omitted) in respect of the like domestic product or in respect of an article from which the imported product has been manufactured or produced in whole or in part.

Paragraph 2 of Article III (cited in Article II.2(a)):

The products of the territory of any contracting party imported into the territory of any other contracting party shall not be subject, directly or indirectly, to internal taxes or other internal charges of any kind in excess of those applied, directly or indirectly, to like domestic products. Moreover, no contracting party shall otherwise apply internal taxes or other internal charges to imported or domestic products in a manner contrary to the principles set forth in paragraph 1 [footnote omitted].

Paragraph 1 of Article III (cited in Article III.2):

The contracting parties recognize that internal taxes and other internal charges, and laws, regulations and requirements affecting the internal sale, offering for sale, purchase, transportation, distribution or use of products, and internal quantitative regulations requiring the mixture, processing or use of products in specified amounts or proportions, should not be applied to imported or domestic products so as to afford protection to domestic production [footnote omitted]. < https://www.wto.org/english/docs_e/legal_e/gatt47.pdf>.

¹⁸⁵ Kasturi Das, *Climate Clubs: Carrots, Sticks and More*, 1/34 EPW 24 (2015), at 25.

¹⁸⁶ Interviews 1, 9, 13, 14, 15, 16.

¹⁸⁷ Committee on Trade and Environment, Promoting Mutual Supportiveness Between Trade and Climate Change Mitigation Actions: Carbon-related Border Tax Adjustments, WTO Doc. WT/CTE/W/248 (March 30, 2011).

¹⁸⁸ See, e.g. Interview 1.

action, these measures would then, *e contrario*, serve to limit future latitude for domestic climate policies outside their scope.¹⁸⁹

Option 4A: Amending WTO rules for BCAs

An effective way of addressing possible inconsistencies between BCAs and WTO law would be to seek an amendment of the GATT and other relevant WTO rules to explicitly allow BCAs.¹⁹⁰ This could be implemented in direct and indirect ways:

- Directly, a change to Articles III.2 (national treatment provision) and II.2.a (border tax adjustment provision) of the GATT could positively state the permissibility of border adjustments for climate policies; similarly, an amendment to Articles I¹⁹¹ and III of the GATT (and potentially also Article 3 of the WTO Agreement on Subsidies and Countervailing Measures (ASCM)) could explicitly exempt BCAs from relevant trade disciplines.
- Indirectly, changes to WTO rules that would affirm the legality of BCAs could include a provision allowing reliance on processes and production methods (PPMs) to differentiate between otherwise ‘like’ products,¹⁹² or incorporate language into Article XX of the GATT to expressly cover climate policy measures in that provision’s exceptions.¹⁹³ At present Article XX¹⁹⁴ covers environmental exceptions, but not climate change-related exceptions per se.

While each of these amendments could be a powerful way to address concerns about the legality of BCAs, their feasibility in the short and medium term is very limited. This is due to the controversial nature of BCAs and the high political and procedural hurdles imposed on changes to the WTO Agreements (see Option 1A above).¹⁹⁵

As scientific and political understanding of the urgency to deal with climate change evolves over time, the persistent and far-reaching asymmetry between a majority of progressive climate actors and a limited number of obstructionists might alter the perception of BCAs and the ability to muster sufficient political support for an amendment in the long term.

¹⁸⁹ Interviews 14 and 16.

¹⁹⁰ G.C. Hufbauer & J. Kim, *supra* note 7, at 10.

¹⁹¹ On the areas of potential tension, see Michael Mehling, Harro van Asselt, Susanne Droege, Kasturi Das & Cleo Verkuijl *supra* note 187, at 36-40.

¹⁹² The ‘likeness’ of products under the WTO regime is a key element of addressing emissions through climate policy measures. Emissions are generally only part of the production process and cannot be found in the physical characteristics of a traded good (i.e. they are non-product-related PPMs). Differentiation of imports or exports based on their non-product-related PPMs (e.g. their ‘embedded carbon’) would need justification under the WTO rules. See Droege *et al.*, *supra* note 13, at 14.

¹⁹³ K. Holzer, CARBON-RELATED BORDER ADJUSTMENT AND WTO LAW (2014), at 253.

¹⁹⁴ Article XX of the GATT:

Subject to the requirement that such measures are not applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination between countries where the same conditions prevail, or a disguised restriction on international trade, nothing in this Agreement shall be construed to prevent the adoption or enforcement by any Member of measures: ...

(b) necessary to protect human, animal or plant life or health; ...

(g) relating to the conservation of exhaustible natural resources if such measures are made effective in conjunction with restrictions on domestic production or consumption;

...<https://www.wto.org/english/docs_e/legal_e/gatt47.pdf>.

¹⁹⁵ Interviews 1, 13, 14, 15, 16.

Option 4B: Adopting a Waiver for BCAs

A further option to reduce legal uncertainty around BCAs is a temporary waiver of WTO obligations pursuant to Article IX.3 of the Agreement Establishing the WTO (see Option 1B above). Such a waiver could, for instance, suspend the application of Articles I and III of the GATT to differentiate products based on carbon content, coupled with an assurance of mutual restraint from legal disputes. In addition, a waiver could set out criteria and design principles for BCAs to ensure a more harmonized application.¹⁹⁶

Given their temporary nature, waivers have proven somewhat more amenable to WTO Members,¹⁹⁷ but the requirement of ‘exceptional circumstances’ and the necessary voting threshold render them only moderately more viable than amendments of WTO law (see Option 1B). Still, their temporary nature could make them an interesting option to facilitate a time-limited introduction of a BCA as a means to stimulate the debate among WTO Members¹⁹⁸ and incentivise more symmetrical climate action. The need for BCAs would thus be overcome over time.

Option 4C: Adopting an Authoritative Interpretation to Allow BCAs

Instead of an amendment to WTO rules, WTO Members could opt for an authoritative interpretation of relevant provisions in the GATT and other WTO Agreements about the legal status of BCAs. Such an authoritative interpretation could, for instance, declare that BCAs are consistent with obligations under the WTO Agreement, notably Articles I and III of the GATT, or that they fall within the scope of Article XX of the GATT. Importantly, an authoritative interpretation could become a means to correct a judicial interpretation against BCAs under the WTO dispute settlement system.¹⁹⁹ While, according to Article IX.2 of the WTO Agreement, a three-fourths majority of WTO Members is required to approve an authoritative interpretation, once adopted this takes effect for all WTO members without requiring ratification (see Option 1C above). Still, overcoming this threshold will be difficult, rendering the feasibility of this option low in the short and medium term.

Option 4D: Agreeing on a ‘Peace Clause’ for BCAs

Less ambitious in scope than an amendment or authoritative interpretation is the adoption of a time-limited moratorium or ‘peace clause’. Based on this option, WTO Members would wait before challenging a BCA under the WTO dispute settlement system, or refrain from using countermeasures against the imposition of a BCA. On the other hand, a peace clause could also be used to suspend the application of a BCA for a specified period of time, for instance three years, during which affected trade partners could enter into negotiations on how to strengthen climate action so that the BCA is not required.²⁰⁰ As a temporary instrument, the purpose of the peace clause would be to buy time to find a permanent resolution.

In terms of its political feasibility, however, a peace clause adopted at the international level would face significant obstacles (see Option 2A above). It could also be implemented with

¹⁹⁶ P.J. Kuijper, *Conflicting Rules and Clashing Courts: The Case of Multilateral Environmental Agreements, Free Trade Agreements and the WTO*, INTERNATIONAL CENTRE FOR TRADE AND SUSTAINABLE DEVELOPMENT (2010), at 42.

¹⁹⁷ G.C. Hufbauer & J. Kim, *supra* note 194, at 11.

¹⁹⁸ Feichtner, *supra* note 69, at 632.

¹⁹⁹ Holzer, *supra* note 197, at 254.

²⁰⁰ Hufbauer & Kim, *supra* note 194, at 13.

more limited scope at the national level, for instance if cooperating countries decide to include relevant language in their domestic climate legislation on a reciprocal basis.²⁰¹ While the feasibility of such a decentralised approach might be greater, the scope will be far more limited.

Option 4E: Amending the Harmonized System

A further option to implement changes in the international trade regime to favour BCAs would be to modify the product classification system used in trade negotiations, the World Customs Organization's Harmonized Commodity Description and Coding System (HS), in order to account for different processes and production methods.²⁰² The HS was developed by the World Customs Organization and contains a nomenclature of products in about 5,000 commodity groups. It serves more than 200 countries as a basis for their customs tariffs and for trade statistics. The HS covers over 98 per cent of internationally traded merchandise.²⁰³ This nomenclature is revised every five years and the last update entered into force on 1 January 2017.²⁰⁴

Conceivably, the HS classification could be revised to distinguish goods based on the carbon-intensity of their PPMs, offering a more solid foundation for differentiation with a BCA. This could provide a basis for assessing the emissions performance of traded goods (i.e. their carbon content) as far as information is available. This idea has been brought up in the context of the Environmental Goods Agreement, as discrimination of goods based on their environmental performance would be needed in order to design a tariff system that favours the environmentally performing (e.g. allowing duty-free trade in solar panels).

In practice, however, such an amendment to the HS would prove difficult or even impossible to apply for all products where general distinctions of carbon content are technically not feasible. An example that could work would be to differentiate steel produced from blast oxygen furnaces (high energy intensity) or from electric arc furnaces (low energy intensity). However, for aluminium this does not seem workable, as it would mean differentiating based on the energy source used to power the aluminium smelting (renewable energy or fossil energy sources).

Politically, it also does not appear viable in the short term and beyond.²⁰⁵ Article 16 of the International Convention on the Harmonized System requires consensus for amendments to the nomenclature and any Contracting Party is allowed to veto changes proposed by the Council based on recommendations of the Harmonized System Committee. Also, amendments to the HS are only made every five years, and the latest round was concluded in 2017, meaning that the next opportunity will only arise around 2022. This option therefore faces a similar hurdle as an outright amendment of WTO law, but the latter avoids the foregoing technical difficulties. One factor in favour of this option is ongoing progress with carbon disclosure and foot printing methodologies, which may over time reduce the technical barriers to a more differentiated HS nomenclature.²⁰⁶

²⁰¹ Hufbauer & Kim, *supra* note 194, at 13.

²⁰² H. Horn & P. C. Mavroidis, *To B(TA) or Not to B(TA)? On the Legality and Desirability of Border Tax Adjustments from a Trade Perspective*, 34 THE WORLD ECONOMY 1911 (2011), at 1932.

²⁰³ See <<http://www.wcoomd.org/en/topics/nomenclature/overview/what-is-the-harmonized-system.aspx>>.

²⁰⁴ See <<http://www.wcoomd.org/en/topics/nomenclature/instrument-and-tools.aspx>>.

²⁰⁵ Interview 15.

²⁰⁶ Interview 13.

Option 4F: Regional or plurilateral cooperation on BCAs

At present, any legal or procedural changes in the trade regime that require consensus among, or approval by, a large majority of countries (such as the WTO membership) appears politically unfeasible. This is due to divisions about the urgency of and the adequate response to climate change, the controversial nature of BCAs, as well as the broader setbacks in international trade negotiations. A more viable option might therefore lie in seeking progress at a plurilateral or regional level among like-minded countries. The advantage of such an approach is that non-participating countries cannot block the negotiations. Countries negotiating a regional trade agreement, for instance, could specify the permissibility and legal conditions of BCAs, and commit to mutual restraint in terms of challenging BCAs that meet these conditions.²⁰⁷ Parties could also explicitly declare the right to invoke Article XX of the GATT to justify BCAs.²⁰⁸ Beyond setting out basic principles and conditions for BCAs, they could further adopt a code of conduct or good practice²⁰⁹ specifying permissible design elements and applications, notification and cooperation procedures, and even an institutional structure to facilitate capacity-building, oversight, implementation, and review of BCAs.²¹⁰ The design elements could also ensure that this approach avoids becoming a disguised form of protectionism. One option to address the concerns of developing countries, for instance, would be to earmark the related revenues for climate finance transfers to developing countries.²¹¹

Although no coalition has so far emerged to advance BCAs, appeals to consider them as a policy option have repeatedly surfaced in several countries.²¹² This suggests potential political support for more formal cooperation on BCA design and implementation. Until such a coalition emerges, however, it remains unclear whether endorsement of BCAs among like-minded countries would have meaningful benefits for the climate, as these countries would in all probability already have largely aligned climate policies. For maximum effectiveness, this form of cooperation would have to involve all major emitting countries, including some – such as the United States – which are not currently endorsing ambitious climate action. Still, over time, a coalition approach could create a nucleus around which other countries might converge, eventually shifting the political and legal discussion around BCAs.²¹³ Prospectively, such cooperation could even result in a plurilateral agreement under Annex 4 of the WTO Agreement, formally integrating this decentralised option into the international trade regime. While adoption of such a plurilateral agreement would still require consensus among all WTO Members (cf. Article IX.9 of the WTO Agreement), it might be more feasible than an amendment of WTO rules or an authoritative interpretation because it would not diminish the rights of non-subscribing WTO Members.²¹⁴

²⁰⁷ Interview 15.

²⁰⁸ Interview 14.

²⁰⁹ On this notion, see Holzer, *supra* note 197, at 258–260. Also see Hufbauer *et al.*, *supra* note 152, at 103–104.

²¹⁰ For some conceptual proposals, see Mehling *et al.*, *supra* note 187, at 44–50. Also see Aaron Cosbey, Susanne Droege, Carolyn Fischer, & Clayton Munnings, *Developing Guidance for Implementing Border Carbon Adjustments: Lessons, Cautions, and Research Needs from the Literature*, 13 (1) REV. ENVIRON. ECON. POL. 3 (2019) (providing guidance for the design and implementation of effective and legally sound BCA based on a literature review).

²¹¹ Michael Grubb, *International Climate Finance from Border Carbon Cost Levelling*, 11 (3) CLIM. POL. 1050 (2011).

²¹² For examples, see Mehling *et al.*, *supra* note 187, at 15.

²¹³ Interview 16.

²¹⁴ Hufbauer & Kim, *supra* note 7, at 11. Also supported by Interview 12.

E. Category 5: Addressing Fossil Fuel Subsidies

The adverse environmental, economic and social implications of the sizable subsidies handed out by governments for the production and consumption of fossil fuels are increasingly clear. The sheer size of these subsidies is a significant burden to the public purse. Although estimates by different international organisations vary, even the most conservative amounts are huge. For instance, a relative conservative estimate by the Organisation for Economic Co-operation suggests that fossil fuel subsidies added up to US\$ 373 billion in 2015.²¹⁵ These fossil fuel subsidies also divert investment from other, often more pressing, development objectives such as health care and education. Moreover, by promoting the burning of fossil fuels, they contribute to climate change and help lock in carbon-intensive energy systems. Importantly, by affecting fossil fuel prices, subsidies can have distorting impacts on trade and investment.

As the main international organisation to discipline subsidies, attention has been drawn to the potential role of the WTO in addressing support to fossil fuels.²¹⁶ As WTO Members are slowly making progress in the negotiations to create new disciplines for another type of environmentally harmful subsidies, those for fisheries, a range of options has been put forward to address through the WTO fossil fuel subsidies too. However, the implementation of any of these options will likely face the same political and legal hurdles that made WTO action on this issue challenging thus far. These include the fact that WTO law at present ‘under-captures’ fossil fuel subsidies compared to renewable energy subsidies. This is because fossil fuel subsidies are often not ‘specific’ in the sense of the WTO Agreement on Subsidies and Countervailing Measures, and adverse trade effects caused by them are difficult to prove.²¹⁷ Perhaps this is why fossil fuel subsidies have not been challenged before the WTO dispute settlement system.

Nonetheless, opportunities to start addressing fossil fuel subsidies within the WTO and other international trade agreements are plentiful.²¹⁸ This section reviews six such options.

Option 5A: Promoting Technical Assistance and Capacity-Building Related to Fossil Fuel Subsidies

Fossil fuel subsidies could be included in existing WTO initiatives on capacity-building and provision of technical assistance,²¹⁹ as well as initiatives undertaken in partnership with other international organisations.

This could help WTO Members identify fossil fuel subsidies that they need to notify, strengthening the transparency around this issue (see also Option 5B). Although there is growing agreement among experts on how to define and measure fossil fuel

²¹⁵ ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT (OECD), *OECD COMPANION TO THE INVENTORY OF SUPPORT MEASURES FOR FOSSIL FUELS* (2018).

²¹⁶ See, e.g. H.B. Asmelash, *Energy Subsidies and WTO Dispute Settlement: Why Only Renewable Energy Subsidies Are Challenged*, 18 J. INT’L ECON. L. 261 (2015). Also see D. De Bièvre, I. Espa & A. Poletti, *No Iceberg in Sight: On the Absence of WTO Disputes Challenging Fossil Fuel Subsidies*, 17 INT’L ENVTL. AGREEMENTS: POLITICS, L. & ECON. 411 (2017). Also J.P. Trachtman, *Fossil Fuel Subsidies Reduction and the World Trade Organization*, INTERNATIONAL CENTRE FOR TRADE AND SUSTAINABLE DEVELOPMENT (2017). Also see C. Verkuijl, H. van Asselt, T. Moerenhout, L. Casier & P. Wooders, *Tackling Fossil Fuel Subsidies through International Trade Agreements*, CLIMATE STRATEGIES (2017).

²¹⁷ Verkuijl *et al.*, *supra* note 220.

²¹⁸ Verkuijl *et al.*, *supra* note 220. Also see INTERNATIONAL CENTRE FOR TRADE AND SUSTAINABLE DEVELOPMENT (ICTSD), *REFORMING FOSSIL FUEL SUBSIDIES THROUGH THE TRADE SYSTEM*, POLICY BRIEF, MARCH (2018).

²¹⁹ See <https://www.wto.org/english/tratop_e/devel_e/build_tr_capa_e.htm>.

subsidies,²²⁰ capacity-building efforts may assist governments in identifying specifically those subsidies that fall under the definition set out by the WTO ASCM. Conceivably, technical assistance could also help build capacity to reform subsidies, as knowledge about their existence is a key precondition for reform.²²¹

However, given that other international and non-governmental organisations such as the World Bank (and its Energy Sector Management Assistance Programme²²²), the IMF and the Global Subsidies Initiative are already active in this field, coordination would be needed to avoid a duplication of efforts, otherwise the added value of the WTO's involvement would be questionable.²²³ Moreover, without a clear mandate from Members,²²⁴ it would be difficult for the Secretariat to focus technical assistance specifically on fossil fuel subsidies, as opposed to subsidies in general.²²⁵ In addition, the potential feasibility of this option is limited in that technical assistance and capacity-building by the WTO Secretariat have to be linked to the implementation of the WTO Agreements. Although there are WTO obligations applying to subsidies in general (e.g. notification under Article 25 ASCM), there are no specific obligations related to fossil fuel subsidies. Providing technical assistance for subsidy reform is very likely outside the WTO Secretariat mandate, and would require specific expertise and resources that other international and non-governmental organisations possess.²²⁶

Technical assistance and capacity-building for fossil fuel subsidies may be more feasible if carried out as part of a broader effort to improve general compliance with the ASCM obligations.²²⁷ Moreover, if any new agreement on disciplines specifically focused on fossil fuel subsidies were to be adopted (see Options 5E and 5F), it may be possible to link technical assistance and capacity-building to those disciplines. Overall, however, the feasibility of this option seems low in the short-term, but may be higher in the medium- to long-term.

Option 5B: Strengthening Transparency of Fossil Fuel Subsidies through Increased Disclosure

Under the ASCM, WTO Members are obliged to notify their subsidies.²²⁸ However, the notification record of fossil fuel subsidies is patchy (in line with broader notification

²²⁰ Doug Koplow, Defining and Measuring Fossil Fuel Subsidies, in THE POLITICS OF FOSSIL FUEL SUBSIDIES AND THEIR REFORM (Jakob Skovgaard & Harro van Asselt eds., 2018).

²²¹ C. Beaton, I. Gerasimchuk, T. Laan, K. Lang, D. Vis-Dunbar & P. Wooders, *A Guidebook to Fossil-Fuel Subsidy Reform*, INTERNATIONAL CENTRE FOR TRADE AND SUSTAINABLE DEVELOPMENT (2013).

²²² See <<http://www.esmap.org>>.

²²³ Interview 20.

²²⁴ This would likely require a ministerial decision. Interview 23. At present, the mandate for technical assistance states that: 'The delivery of WTO technical assistance shall be designed to assist developing and least-developed countries and low-income countries in transition to adjust to WTO rules and disciplines, implement obligations and exercise the rights of membership, including drawing on the benefits of an open, rules-based multilateral trading system.' See World Trade Organization, Doha Ministerial Declaration, WTO Doc. WT/MIN(01)/DEC/1 (November 20, 2001), at para. 38.

²²⁵ Interviews 17, 20, 21, 22. Of course, like-minded Members can also agree among themselves to engage in capacity-building and technical assistance; but this can also be done outside the auspices of the WTO. Interview 22. Another option is for the Secretariat to work together with other international organisations, such as the United Nations Environment Programme. Interview 25.

²²⁶ Interviews 17, 21.

²²⁷ Interview 22.

²²⁸ ASCM, Article 25. See <https://www.wto.org/english/docs_e/legal_e/24-scm_01_e.htm>

deficiencies).²²⁹ To improve notifications, Members could, alone or with other Members, start to voluntarily notify fossil fuel subsidies under the ASCM. Self-reporting could help governments and other stakeholders better understand what subsidies are being granted, and track efforts to reform them over time. Although, as the Group of 20 (G20) experience has demonstrated,²³⁰ self-reporting may mean that only a limited number of subsidies are notified, it is a first step towards more transparency.

Beyond strengthening notifications on a voluntary basis, Bacchus suggests to strengthen the enforceability of existing notification obligations by ‘[m]andat[ing] full disclosure of fossil fuel subsidies under WTO rules’.²³¹ This option would likely require an amendment (see Option 5E), as Article 25 of the ASCM (on notification) does not specify which types of subsidies should be notified beyond those meeting the definition of Articles 1–2,²³² and does not specify any consequences for incomplete notifications. While mandatory disclosure would require an amendment, another option already possible within existing rules is counter-notification, with one Member bringing to the attention a measure by another Member that should have been notified.²³³

In addition to notifications under the ASCM, fossil fuel subsidies (and their reform) have also been discussed in Trade Policy Reviews (TPRs) under the TPRM (see also Option 2B above). Members alone, or working together, could continue to raise issues related to fossil fuel subsidies in this process. Going further, the Trade Policy Review Body could ask the Secretariat to pay attention to fossil fuel support in its discussion of subsidies for the energy sector, drawing on external sources such as G20 peer reviews.²³⁴ While some Members have encouraged the Secretariat to do so,²³⁵ fossil fuel subsidies are not yet systematically evaluated.

Generally, improved transparency could help shed light on the subsidies provided, especially by countries that are not reporting or undergoing reviews in other forums. Moreover, transparency can help avoid the emergence of disputes, instead generating dialogue and promoting clarity, as well as options for reform.²³⁶ However, any effort to strengthen

²²⁹ G. Shaffer, R. Wolfe & V. Le, *Can Informal Law Discipline Subsidies?* 18 J. INT’L ECON. L. 711, (2015). Also see Verkuil *et al.*, *supra* note 220. In October 2016, 89 Members had not yet filed their 2015 notifications and 63 Members had failed to file their 2013 notifications. The Chair of the SCM Committee lamented ‘discouragingly low compliance’ and admitted that ‘chronic low compliance caused a serious problem in the proper functioning of the [ASCM]’ (Press Release, World Trade Organization, Chair Cites ‘Discouragingly Low’ Compliance with WTO Subsidy Notification Requirements (October 25, 2016), <https://www.wto.org/english/news_e/news16_e/scm_28oct16_e.htm>).

²³⁰ J.E. Aldy, *Policy Surveillance in the G-20 Fossil Fuel Subsidies Agreement: Lessons for Climate Policy*, 144/1 CLIM. CHANGE. 97 (2017). J. Smith & J. Urpelainen, *Removing Fuel Subsidies: How Can International Organizations Support National Policy Reforms?* 17 INT’L ENVTL AGREEMENTS: POLITICS, L. & ECON. 327, (2017).

²³¹ Bacchus, *supra* note 12, at 17. See also James Bacchus, *Triggering the Trade Transition: The G20’s Role in Reconciling Rules for Trade and Climate Change*, INTERNATIONAL CENTRE FOR TRADE AND SUSTAINABLE DEVELOPMENT (2018), at 17.

²³² Article 1 ASCM provides a detailed definition of ‘subsidies’. Article 2 ASCM explains under which conditions subsidies are deemed ‘specific’, see <https://www.wto.org/english/docs_e/legal_e/24-scm_01_e.htm>.

²³³ H.B. Asmelash, *Phasing out Fossil Fuel Subsidies in the G20: Progress, Challenges, and Ways Forward*, INTERNATIONAL CENTRE FOR TRADE AND SUSTAINABLE DEVELOPMENT (2017).

²³⁴ Verkuil *et al.*, *supra* note 220.

²³⁵ Interview 24.

²³⁶ R. Wolfe, *Letting the Sun Shine in at the WTO: How Transparency Brings the Trading System to Life* (World Trade Organization Economic Research and Statistics Division Staff Working Paper, ERSD-2013-03, 2013), at 22.

transparency should ensure that it does not duplicate data collection efforts already taking place in other international organisations and forums,²³⁷ including in the SDGs process.²³⁸

In terms of feasibility of transparency initiatives, options related to using the TPRM seem most feasible in the short-term.²³⁹ Countries belonging to the Friends of Fossil Fuel Subsidy Reform already seek to consistently raise the issue in their questions and statements under the TPRM, usually with a view of encouraging progress by other Members.²⁴⁰ Although the WTO Secretariat could seek to collect more systematically data on fossil fuel subsidies without formal approval of Members, it does require resources.²⁴¹ In addition, if the Secretariat were to start doing so only for fossil fuel subsidies, it would likely raise questions from WTO Members.

Self-notification could be a next step on the way to a mandatory system, but it would require some Members to take the lead and be confident that their notifications would not necessarily lead to a challenge before the WTO dispute settlement system. The Friends of Fossil Fuel Subsidy Reform²⁴² could be one such group.²⁴³ The feasibility of counter-notifications is limited in that they are likely to trigger detailed scrutiny of the counter-notifying Member's own notifications.²⁴⁴

Lastly, any mandatory obligation to disclose fossil fuel subsidies would likely run into significant opposition, at least in the short- to medium-term. Generally, new notification requirements would likely only be accepted if accompanied by new rules focused specifically on fossil fuel subsidies, as can be seen in the cases of agriculture and fisheries subsidies (the latter still under negotiation).²⁴⁵ Nonetheless, transparency of fossil fuel subsidies could be addressed in proposals to improve notifications on subsidies in general (e.g. as tabled by the European Union in 2018²⁴⁶) or notifications in general (e.g. as tabled by the United States in 2017²⁴⁷).²⁴⁸

Strengthening transparency under the WTO could receive a boost if progress is made a part of the SDGs process. Under SDG 12.c.1, the United Nations Environment Programme (UNEP) is leading efforts to develop a methodology for measuring fossil fuel subsidies. If this methodology is adopted, UNEP would be responsible for collecting data on UN Members for the period 2020–2030. This could reinforce efforts under the WTO, including on notifications.²⁴⁹ More generally, increasing available data on Members' subsidies can exert a

²³⁷ Interview 20.

²³⁸ SDG 12.c is the 'rationaliz[ation of] inefficient fossil-fuel subsidies that encourage wasteful consumption ... including by restructuring taxation and phasing out those harmful subsidies, where they exist, to reflect their environmental impacts' (U.N. General Assembly, *Transforming our World: The 2030 Agenda for Sustainable Development*, U. N. Doc. A/RES/70/1 (2015). To put SDG 12.c in practice, indicators are being developed to help measure progress. One of these indicators focuses specifically on measuring fossil fuel subsidies. Interview 17.

²³⁹ Interviews 17, 20, 25.

²⁴⁰ Interview 17.

²⁴¹ Interview 20.

²⁴² The Friends are an informal group comprising nine countries – Costa Rica, Denmark, Ethiopia, Finland, New Zealand, Norway, Sweden, Switzerland and Uruguay – that seek to promote fossil fuel subsidy reform.

²⁴³ Interviews 19, 21, 23.

²⁴⁴ Interview 17.

²⁴⁵ Interview 20.

²⁴⁶ *Report on Implementation*, *supra* note 174.

²⁴⁷ General Council/ Council for Trade in Goods, *Procedures to Enhance Transparency and Strengthen Notification Requirements under WTO Agreements - Communication from the United States*, WTO Doc. JOB/GC/148–JOB/CTG/10 (October 30, 2017).

²⁴⁸ Interviews 21, 24.

²⁴⁹ Interviews 17, 18.

positive influence on transparency under the WTO.²⁵⁰ Another way to pursue this objective at the WTO is by strengthening transparency through regional trade agreements.²⁵¹

In short, strengthening transparency through the WTO is feasible in the short-term on a voluntary as opposed to mandatory) basis, specifically through the TPRM process, where issues related to fossil fuel subsidies can be raised by some Members. However, strengthening fossil fuel subsidy notifications will likely require some Members to set the example, or will need to be linked to broader proposals on strengthening notifications.

Option 5C: Pledge-and-Review of Fossil Fuel Subsidies

There is another option to strengthen transparency. WTO Members, again, acting alone or in a small group with other Members, could make a non-binding pledge to eliminate or progressively reduce their fossil fuel subsidies. They could then follow up reporting progress and reviewing each other's advances.²⁵² The regular pledge of subsidy reform could make it part of a bargaining process, allowing Members to trade-off commitments to reform fossil fuel subsidies with other trade-related commitments.²⁵³

The rationale of this option would be to extend existing pledge-and-review processes on fossil fuel subsidies (notably the voluntary peer reviews under the G20 and APEC) to other WTO Members. The adoption of (voluntary) commitments by states to reform or remove fossil fuel subsidies can increase the reputational costs of reneging on that commitment.²⁵⁴ The process itself could even be seen as a confidence-building exercise that could pave the way for binding disciplines on fossil fuel subsidies, through which countries could show that they are undertaking reform and get acknowledgement for their achievements through an institution such as the WTO.²⁵⁵

The feasibility of this option may be constrained given that making voluntary pledges is not a common process in the context of the WTO. Moreover, Members may fear being challenged before WTO dispute settlement if they fail to fulfil their pledges.²⁵⁶

Like other options, the feasibility would increase if a small group of countries rather than the whole WTO membership were involved.²⁵⁷ The group could seek to enact this informally, by launching such a process on the margins of a WTO meeting.²⁵⁸ However, if it were to be a formal initiative under the WTO, the option would likely need the support of at least G20 and APEC members to avoid a duplication of efforts.²⁵⁹ While these groups have made commitments to phase out and rationalise inefficient fossil fuel subsidies, getting their members, including the world's largest economies, to follow-up under the umbrella of the WTO presents a significant political hurdle. Another challenge would be to convince WTO Members that the WTO rather than, for instance, the United Nations' High-Level Political Forum on Sustainable Development²⁶⁰ is an appropriate venue for extending pledge-and-review to countries other than the G20 and APEC.²⁶¹

²⁵⁰ Interview 22.

²⁵¹ Interview 17.

²⁵² Verkuijl *et al.*, *supra* note 220.

²⁵³ Trachtman, *supra* note 220, at 18.

²⁵⁴ Smith & Urpelainen, *supra* note 234.

²⁵⁵ Interview 20.

²⁵⁶ Interview 22.

²⁵⁷ Interview 20.

²⁵⁸ Interview 24.

²⁵⁹ Interview 17.

²⁶⁰ The High-Level Political Forum is a UN body that plays a key role in the follow-up and review of Agenda 2030, including the SDGs. See <https://sustainabledevelopment.un.org/hlpf>.

²⁶¹ Interview 19.

The short-term feasibility of pursuing this option within the WTO therefore seems low, but a small group of Members acting outside the formal process on a voluntary basis would increase its chances.

Option 5D: Adopting a Political Declaration on Fossil Fuel Subsidies

A further option is for WTO Members, or a subset thereof, to adopt a political declaration on fossil fuel subsidies. Such an initiative could take the form of statements of intent regarding fossil fuel subsidies in the context of the WTO. For instance, although discussions in the CTE occasionally touch upon the issue, Members could agree to continue discussing fossil fuel or wider energy subsidies within the CTE, and specify that the CTE's mandate should include discussions on how they could be reformed within the WTO. Moreover, WTO Members could more generally state their support for addressing the issue under the WTO. The 2017 'Fossil Fuel Subsidies Reform Ministerial Statement', adopted by 12 Members at the 11th Ministerial Conference (MC11) of the WTO, is an example.²⁶² However, the number of signatories was relatively limited. Friends members that are also EU Member States (Denmark, Finland, Sweden) were not able to sign up because the EU as a whole did not sign up.²⁶³

In terms of feasibility, the question therefore is whether more countries will be willing to sign up to it in the future. A separate Communiqué²⁶⁴ by the Friends of Fossil Fuel Subsidy Reform (released, outside the trade context, in 2015) was endorsed by other countries outside the group (including G7 members Canada, France, Italy, the United Kingdom and the United States). This shows that more countries are supportive of the issue,²⁶⁵ but it remains to be seen whether they are also willing to address the issue in the context of the WTO.

Mobilisation of other countries by the existing signatories will be needed.²⁶⁶ The challenge will be to move the issue forward by becoming more concrete, while at the same time also attracting more support. Nonetheless, it can be seen as positive that the initial declaration was signed by 12 Members. In comparison, the first statement in the WTO on the need to address fisheries subsidies was made by only one Member, New Zealand, in 1998.²⁶⁷ In the case of fisheries subsidies, however, initial political declarations were followed up by concrete proposals. This would need to happen as well for the political declaration on fossil fuel subsidies.²⁶⁸

In short, while the feasibility of (further) political declarations on fossil fuel subsidies is high, questions remain about the number of Members prepared to sign up, and whether future text can go beyond the MC11 ministerial statement taking concrete steps towards the adoption of commitments or disciplines on fossil fuel subsidies at the WTO.

²⁶² World Trade Organization Ministerial Statement, Fossil Fuel Subsidies Reform, WTO Doc. WT/MIN(17)/54 (December 12, 2017). The statement was made by Chile, Costa Rica, Iceland, Liechtenstein, Mexico, the Republic of Moldova, New Zealand, Norway, Samoa, Switzerland, the Separate Customs Territory of Taiwan, Penghu, Kinmen and Matsu, and Uruguay.

²⁶³ Interview 20. Trade is an exclusive competence of the EU (Article 3 of the Treaty on the Functioning of the European Union), meaning only the EU – through the European Commission – can act in international trade negotiations. As such, EU Member States could not separately sign up to the ministerial statement without the support of the full EU membership.

²⁶⁴ ASIA-PACIFIC FRIENDS OF FOSSIL FUEL SUBSIDY REFORM (FFFSR) (2015), Fossil-Fuel Subsidy Reform Communiqué, <<http://fffsr.org/communique/>>

²⁶⁵ Interviews 17, 21.

²⁶⁶ Interview 19.

²⁶⁷ Interview 24.

²⁶⁸ Interview 21.

Option 5E: Amending the Agreement on Subsidies and Countervailing Measures so as to Address Fossil Fuel Subsidies

Another way of addressing the issue through the WTO would be to change existing disciplines for fossil fuel subsidies. This could be done, for instance, by including fossil fuel support as a category of prohibited subsidies (in addition to export subsidies and local content subsidies) under Article 3 of the ASCM.²⁶⁹ Any such provision need not apply to *all* fossil fuel subsidies, but could be limited to a specific sub-set, for instance based on particular trade-related or environmental effects. This, in turn, may require a change to the ‘adverse effects’ criterion of the ASCM, which currently only focuses on adverse trade effects. Pereira proposes a prohibition for ‘the most egregious kinds of subsidies’ to fossil fuels, including those for new coal-fired power plants, for new fossil fuel exploration and extraction, or for infrastructure for the fossil fuel industry.²⁷⁰ Even if limited in scope, a prohibition could provide a strong signal, backed by the WTO’s dispute settlement system, pushing countries to phase out this specific support.

Multilateral and regional negotiations on fisheries subsidies could be used as an example of how to distinguish between different types of measures in this regard. For instance, the targeting of subsidies used to support illegal, unreported and unregulated fishing in the Trans-Pacific Partnership (TPP) draft demonstrates how trading partners can agree on a specific category of prohibited subsidies.²⁷¹ The TPP seeks to link subsidy prohibitions to ‘negative effects’ (based on ‘the best scientific evidence available’) on overfishing.²⁷² Similarly, in the WTO negotiations on fisheries subsidies, it was suggested to prohibit a wide range of measures taking into account the particular characteristics of the sector.²⁷³

Any prohibition could take into account the type of Member and provide for special and differential treatment, e.g. exempting least developed countries or linking to provisions on technical assistance and capacity-building. Exemptions could also be made for countries that can prove subsidies are needed to support low-income communities, or prohibitions could be phased in gradually for some or all countries.²⁷⁴

Expanding the category of prohibited subsidies would amount to an amendment, and would as such be subject to the constraints outlined under Option 1A. But even before an amendment could be agreed upon, there would need to be a negotiating mandate. Given that no new negotiating mandates have been agreed since the Doha Round, and with a reluctance of a group of WTO Members to address new issues when the existing negotiating mandate has not been concluded, it is unlikely that discussions on amending the ASCM would start any time

²⁶⁹ G. Horlick & P.A. Clarke, *Rethinking Subsidy Disciplines for the Future*, INTERNATIONAL CENTRE FOR TRADE AND SUSTAINABLE DEVELOPMENT (2016), at 14.

²⁷⁰ H. Pereira, H. (2017), *How the WTO Can Help Tackle Climate Change through Fossil Fuel Subsidy Reform: Lessons from the Fisheries Negotiations*, INTERNATIONAL CENTRE FOR TRADE AND SUSTAINABLE DEVELOPMENT (2017), at 13–14. See also J.P. Trachtman, *supra* note 220.

²⁷¹ TPP, Article 20.16.5(b).

²⁷² TPP, Article 20.16.5(a).

²⁷³ World Trade Organization, *Draft Consolidated Chair’s Text of the AD and SCM Agreements*, WTO Doc. TN/RL/W/213 (November 30, 2007), Annex VIII, Article I. One proposed prohibition specifically related to the environmental impact of the subsidy: ‘any subsidy ... the benefits of which are conferred on any fishing vessel or fishing activity affecting fish stocks that are in an unequivocally overfished condition shall be prohibited’ (*supra* Annex VIII, Article I.2).

²⁷⁴ Verkuijl *et al.*, *supra* note 220.

soon.²⁷⁵ Even in the case of fisheries subsidies, negotiations have continued for almost 20 years, and have not been concluded yet.²⁷⁶

More generally, a challenge would be to get the prohibition right. While proposals focusing on a specific set of fossil fuel subsidies may be successful, it would be difficult, for instance, to achieve common ground on which subsidies are ‘the most egregious’ or under which conditions exemptions may apply. A historical example also suggests that prohibitions lead to calls for exemptions. The 1951 Treaty of Paris, which created the European Coal and Steel Community (the precursor to the EU) prohibited all coal (and steel) subsidies, but within little more than a decade, derogations from that prohibition had become commonplace.²⁷⁷

Having said that, the possible conclusion of negotiations on fisheries subsidies disciplines may offer an important precedent, and generate momentum towards disciplines on fossil fuel subsidies in the longer run.²⁷⁸ While the prospects for an amendment are therefore low in the short- to medium-term, they may improve in the long-term.

Option 5F: A New WTO Agreement on Fossil Fuel Subsidies

Although new disciplines for fossil fuel subsidies could be incorporated into the ASCM through an amendment, another option is to adopt a separate WTO Agreement on Fossil Fuel Subsidies. This could be concluded as a plurilateral agreement among a subset of WTO Members.²⁷⁹ The advantage of a focused approach would be the limitation of the risk to open up other issues and subsidies within the same discussion.

The prospects of a specific agreement, even a plurilateral one, depend very much on some of the major countries (in terms of trade flows and size of these subsidies) getting on board (e.g. China, EU, Japan, US). At present, securing their participation is likely to be difficult.²⁸⁰ However, the critical mass needed for an Agreement on Fossil Fuel Subsidies is ultimately a political decision by its proponents.²⁸¹

Even if plurilateral negotiations are launched, it may be hard to reach an agreement, as ongoing negotiations among seemingly like-minded countries on the Environmental Goods Agreement and the Trade in Services Agreement show.²⁸² It would be important for the participating countries to be convinced of the benefits of reforming subsidies, knowing that others may not take the same action.²⁸³ The agreement could cover energy subsidies, or energy sector reform²⁸⁴ more broadly, giving countries with an interest in renewable energy subsidies an incentive to participate. While it would be more complex, it may also be more politically palatable.²⁸⁵

In short, any new Agreement on Fossil Fuel Subsidies seems likely only in the medium to long term.

²⁷⁵ Interviews 19, 21, 22, 23, 25.

²⁷⁶ Interview 21.

²⁷⁷ Interview 21. See also R. Steenblik, J. Sauvage & C. Timiliotis, Fossil Fuel Subsidies and the Global Trade Regime, in *THE POLITICS OF FOSSIL FUEL SUBSIDIES AND THEIR REFORM* (Jakob Skovgaard & Harro van Asselt eds., 2018).

²⁷⁸ Interview 22.

²⁷⁹ ICTSD, *supra* note 222.

²⁸⁰ Interviews 20, 25.

²⁸¹ Interview 17.

²⁸² Interview 23.

²⁸³ Interview 22.

²⁸⁴ Interview 25.

²⁸⁵ Interview 20.

IV. CONCLUSIONS AND POLICY RECOMMENDATIONS

This article has analysed a range of policy options to improve coherence between the international trading system and climate action in greater depth than the existing literature has done so far. It sheds light on what options may be worth exploring further by trade and climate policymakers, non-governmental organisations and international organisations interested in ensuring that the international trading system helps to achieve the goals of the Paris Agreement. We argue that legal changes at the WTO appear to be difficult in the near future, particularly in the current geopolitical climate of trade wars among key Members like the United States²⁸⁶ and China, and the ongoing impasse regarding the appointment of new Appellate Body judges.

The low prospect of legal changes in the WTO does not mean, however, that all possibilities for the trade system to work for climate action are exhausted. It only means that other policy options need to be explored.

Based on our analysis, we propose the following six ways to support the Paris Agreement in the near term.

- (i) *Leverage regional trade agreements (RTAs)*: This could be done by including climate-related provisions in new RTAs. In addition, countries can review and renegotiate existing RTAs for this purpose.
- (ii) *Engage in plurilateral efforts with like-minded WTO Members (e.g. Environmental Goods Agreement)*: Policy-makers, for instance in the EU and China, could revive the stalled negotiations on the Environmental Goods Agreement (EGA). In particular, they should focus on defining environmental goods and identifying the common interest of the parties involved. New plurilateral agreements or cooperative engagement on specific areas, such as border carbon adjustments and fossil fuel subsidy reform, could also be explored (see below).
- (iii) *Use WTO and UNFCCC forums more intensively*: Existing institutional exchange and coordination between forums such as the WTO Committee on Trade and Environment (CTE) and the UNFCCC's 'Improved Forum on the Impact of the Implementation of the Response Measures' should be intensified. This could be done by systematically addressing climate change through the CTE, by carrying out studies on the impacts of trade-related climate policies through the Improved Forum, and by regular meetings between the WTO and UNFCCC secretariats.
- (iv) *Include climate-related issues in the WTO Trade Policy Review Mechanism (TPRM) on a voluntary basis*: WTO Members would voluntarily include a gradually increasing amount of information on their climate-related trade measures, and vice versa. Members could raise climate-related queries during trade policy reviews.
- (v) *Advance border carbon adjustments (BCAs) in a coalition of like-minded countries*: Though BCAs have been controversial in the past, by working together on the design and implementation of BCAs, like-minded countries could ensure that this policy does not turn into a disguised form of protectionism. They could agree on accepted features of a BCA, and reciprocally pledge not to contest a BCA imposed by one participating country against another. Over time, the group of countries could expand, becoming a catalyst for broader and eventually multilateral action.

²⁸⁶ Craig VanGrasstek, "The Trade Policy of the United States under the Trump Administration", EUI Working Papers No. RSCAS 2019/11, European University Institute Robert Schuman Centre for Advanced Studies, Global Governance Programme.

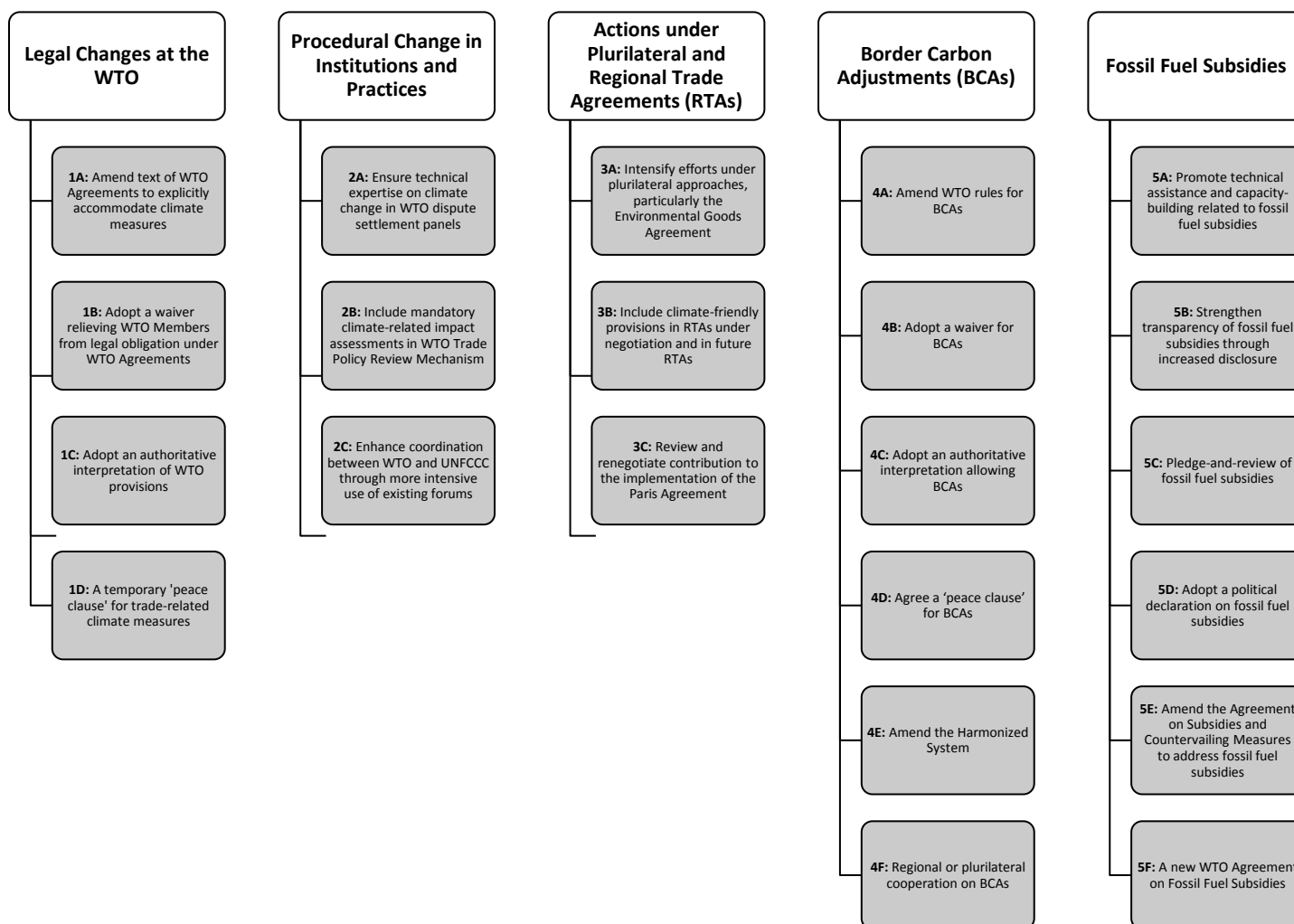
- (vi) *Promote fossil fuel subsidy reform through a group of WTO Members*: Fossil fuel subsidies are already addressed by a small group of WTO Members in the context of trade policy reviews, and a group of 12 countries adopted a ministerial statement in 2017 calling on the WTO to discipline them. A way forward would be to gradually expand the group of countries raising fossil fuel subsidies in the WTO to include Members responsible for sizeable subsidies (such as China, the EU, India and the United States). Moreover, Members can help increase transparency by voluntary notification of fossil fuel subsidies, and continuing to include such subsidies in trade policy reviews.

The issue areas covered in this article are by no means exhaustive. Options related to other issues worth considering are manifold, for example subsidies for renewable energy, the use of free allocation in emissions trading systems, the transfer of climate-friendly technologies and intellectual property rights protection, promotion of climate-friendly investment, climate-friendly government procurement. However, covering all these issues is beyond the scope of this article. As we shed some light on general proposals which are relevant for those issues as well, we leave it to further research to draw on our results and analyse specificities in more detail.²⁸⁷

Although we have sought to present our reasoning for the feasibility of each option as clearly as possible, we acknowledge that feasibility is the result of a complex and dynamic set of factors that cannot all be captured and are difficult to predict. The assessment can serve as a compass of which options may be worth exploring in greater detail by those actors – including governments and non-state actors – keen to make the international trade system work for the promotion of climate protection.

²⁸⁷ For instance, the suggestion by the E15 Expert Group to '[s]pecify that Article XX of the GATT applies to the Agreement on Subsidies and Countervailing Measures (ASCM), so that subsidies intended to support climate action may deviate from the general obligations' (Bacchus, *supra* note 12, at 17, Policy Option 17) is one that would likely require an amendment or, at a minimum, an authoritative interpretation of this provision. The relevant procedures for amendment and authoritative interpretations as also their political feasibility are discussed in the 'general options' 1A and 1C, *supra*, Section III.A.

Annex 1: Overview of Options



Annex 2: List of Interviewees

Views expressed by interviewees were personal, and do not necessarily represent those of the governments or organisations they are affiliated with.

Name	Organisation	Date of interview
Christophe Bellmann	International Centre for Trade and Sustainable Development, Geneva, Switzerland	30 May 2018
Alvaro Cedeno	Permanent Mission of Costa Rica to the WTO, Geneva, Switzerland	26 April 2018
Brent Cloete	DNA Economics, Pretoria, South Africa	11 May 2018
Aaron Cosbey	International Institute for Sustainable Development, Winnipeg, Canada	23 April 2018
Assia Elgouacem	Organisation for Economic Co-operation and Development, Paris, France	6 June 2018
Luis Fernandez	Permanent Mission of Costa Rica to the WTO, Geneva, Switzerland	7 June 2018
Charlotte Frater	Permanent Mission of New Zealand to the WTO, Geneva, Switzerland	28 May 2018
Arunabha Ghosh	Council on Energy, Environment and Water (CEEW), New Delhi, India	9 May 2018
Kateryna Holzer	Universität Bern, Switzerland	15 May 2018
Gary C. Hufbauer	Peterson Institute for International Economics, Washington, DC, USA	7 May 2018
Mario Ianotti	Italian Ministry for the Environment, Rome, Italy	27 April 2018
Joy Aeree Kim	United Nations Environment Programme, Geneva, Switzerland	30 May 2018
Simon Lester	Cato Institute, Washington, DC, USA	25 April 2018
Joshua Meltzer	Brookings Institution, Washington, DC, USA	16 May 2018
Joost Pauwelyn	The Graduate Institute of International and Development Studies, Geneva, Switzerland	9 May 2018
Henrique Pacini	United Nations Conference on Trade and Development (UNCTAD). Geneva, Switzerland	27 April 2018
Felipe Pietrini	Permanent Mission of Mexico to the WTO, Geneva, Switzerland	6 June 2018
Rodrigo Polanco	World Trade Institute, Bern, Switzerland	8 May 2018
Yash Ramkolowan	DNA Economics, Pretoria, South Africa	14 May 2018
Malena Sell	Ministry of Foreign Affairs, Helsinki, Finland	30 May 2018
Ambassador Syed Tauqir Shah	Permanent Mission of Pakistan to the WTO, Geneva, Switzerland	21 June 2018

Ronald Steenblik	Organisation for Economic Co-operation and Development, Paris, France	6 June 2018
Ludivine Tamiotti	World Trade Organization, Division of Trade and Environment, Geneva, Switzerland	16 May 2018
Vangelis Vitalis	Ministry of Foreign Affairs and Trade, Wellington, New Zealand	13 June 2018
Jake Werksman	European Commission, Brussels, Belgium	24 April 2018
Wei Zhuang	International lawyer, Geneva, Switzerland	27 April 2018